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This Old House

MAY 2007

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deck

- the smartest layouts
- materials that last
- 27 custom-look details

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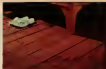
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LOOKING



FEELING



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Cartoonography by
Ken Gribble

Styling by Sarah Allen

YourSpace.



The eight-passenger Honda Pilot. For those who need more than a home page to feel at home, the Pilot's 244-hp engine, available heated leather seats and DVD Rear Entertainment System will give you a place to truly call your own.

The Pilot  **HONDA**

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letter FROM THIS OLD HOUSE

Don't Call Me Ishmael

"Hey, what are you doing?"
"Nothing."
"What are you up to?"
"Nothing."
"You got nothing going on?"
"Nope. Nothing."

That's me on the phone, not asking my brother to come over and help me finish the deck we'd started to build off my kitchen. Sure, I could've come right out with it, but I've asked before—I don't know how many times—and burned through too many of his summer weekends and a lot of his patience trying to get the damn thing done.

I had to be careful, as I pruned, gathered my confidence and—"It's your white whale." He said that before I could speak. "If that deck had a little white and red, you'd be linked to an old tool on your way down right now."

He was on to me! The boat was being steered. Ahhh lost his leg in pursuit of Moby Dick. I'd only lost the nail on my big toe when I dropped a wire pin into it. That, Ahhh spent a whole year chasing the whale while on his final far journey. The deck has taken me, well, longer than that. How can I forget? It's added to two years and no more (unless it's on it's back). He had a whale bonfire of help, too. I had only my wife, which, man, we argued as much as—though my wife says more than—we worked.

In retrospect, I look on a proper bigger than I could handle to first bandaid upon him. And I made the design too complicated (a platform of horizontal planks set down around a tree with other boards framing it picture-style—most I repeated as each star). And that I chose, as a wood there very hard to work with (it's got the same fire-retardant as steel). I guess there's a lesson there, just like in the Moby book.

There are lessons in TCM this month, too—all the usual information, instruction, and inspiration, as well as a piece about why it's called "something there on the weekend on page 53 (should have said that one two years ago)—and a wonder about how you and your significant other can achieve something together on page 112. I hope you'll find them useful.

As for me, I've got a ways to go. In the phone you'll see over my shoulder that the deck is doing nice, yet complete. I figure I'll finish them this spring. Unless I don't. In which case, all the easier for someone to pick me out of the crowd.

Scott O'Connell
SCOTT O'CONNELL
EDITOR



The editor taking a break from his deck-building quest.

Of course, Ahhh lost his leg in pursuit of Moby Dick; I'd only lost the nail on my big toe when I dropped a compressor on it.

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around the **HOUSE**

EDITED BY KELLY BEAMAN

Countertops With Character

Wood-slab surfaces are
warming up the kitchen

PERHAPS BECAUSE celebrity chefs such as Emeril Lagasse use them, or maybe homeowners are just craving more warmth and coziness in their kitchens. Whatever the reason, wood-slab countertops are all the rage, available in exotic new species such as wenge, laurelwood, and cocobolo, and with dramatic profiles like natural, petricelli, and raw edges.

With the dark look comes the real advantage: wood is warmer and less slippery than stone or steel. One drawback avoided: it's also cheaper than granite, the most popular high-end countertop choice. At John Boos, where Emu's got his, a wenge is around \$140 per square foot. While some upgrades required, you say a few coats of food-grade mineral oil supplied every few months takes care of that flame and knife stains can be erased with sanding. And, a term reserved for the pros: as long as you stain, seal, and go to town, you can make your own. Just stick to the grain and hand-sand and save the staining for your cabinet.

- 1 Bamboo, \$12 per square foot: strongbamboo.com
- 2 Acrylic on heart pine, \$80 per square foot: akronwood.com/akron/heartpine.htm
- 3 Maple, \$130 per square foot: johnboos.com
- 4 Acrylic on hickory, \$180 per square foot: www.woodwithcharacter.com
- 5 Indian rosewood, \$94 per square foot: charleston.com

SPEAKING OF COUNTERTOPS...



THE REMODELER
Estimates at Edison's University of Construction have found that copper surfaces make it will last longer than stainless steel.



AMERICA'S NEXT TOP REMODELER
In the average Midwestern household, 75 percent of the budget goes to the kitchen.



FOLLOW THE LAMINITE ROAD
The last time it was used, the National Association of Home Builders found 91 million feet of countertops had been installed in the U.S.



Pet-Friendly Flooring

When flooring is often the best test of a pet's home—unless it's in your basement. There it's harder to include in the world that few four-legged and occasional piddlers will visit the oak or pine boards if you're the King or Queen. Because in a show room, replacement, but to protect what you've got, check out the other alternative options we've found. —JAMES H. COE

Not sure if the floor can be replaced or if it's a time to pull it up and start over? Look for the following options.



Pumpkin the floor and your furry friend by laying down a layer of artificial grass. It's made of synthetic fibers that won't shed and looks natural. (See page 100 for more on this.)

Vinyl tiles like this, which are made of PVC, can be laid over existing flooring. They're easy to install and can be replaced one by one.



Q & A

When William Peterson, a Seattle resident, began his kitchen remodel in 2008, he had two options for his flooring: tile or vinyl. But when he saw the new vinyl, he decided to go with the new vinyl.

What year did Peterson get a pet?

A. 2004 B. 2005 C. 2006 D. 2007

(From "Pet-Friendly Flooring" page 100)



1:



2:



3:



4:

5 OF THE BEST NONTOXIC CLEANERS YOU AREN'T USING

THE QUESTION IS WHY? AFTER ALL, THEY'RE WITHIN REACH—RIGHT IN YOUR KITCHEN CUPBOARD



5:

Many people have long been the subject of a bad reputation, and change around the house, give them the benefit of being here. These solutions are all in your kitchen cupboard, and with a little effort and a little elbow grease, you can have a clean, shiny, and safe home.

- 1. HOT SAUCE CLEANS COPPER.** Rub it on a cloth and use it to clean copper. It's a natural disinfectant and can be used on many other surfaces.
- 2. OLIVE OIL BRIGATIONS UP WOOD.** Use a little oil to clean wood. It's a natural disinfectant and can be used on many other surfaces.
- 3. WHITE VINEGAR REMOVES RED WINE.** The best way to remove red wine stains is to use white vinegar. It's a natural disinfectant and can be used on many other surfaces.
- 4. VINEGAR CLEANS PAINTED SURFACES.** Rub it on a cloth and use it to clean painted surfaces. It's a natural disinfectant and can be used on many other surfaces.
- 5. CORNMEAL SOAKS UP GREASE.** Use it to clean grease. It's a natural disinfectant and can be used on many other surfaces.

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COURTESY/COOPER HEWITT
TOP: A covered bed painting,
circa 1700, and letters and
samples from homeowners.
Greg Hemmingsworth with "Views
of the American Style of
Interior Design" by John, an
oil on paper, 18th-century
roll-in, 18th-century bed
and fourth, 18th-century
covering, 1750, handmade
woodwork, George
Washington wallpaper, 1800
Japanese inspired wallpaper
showing British style
design, 18th-century, 18th-century

These Walls Really Do Talk

You can't buy its wallpaper, but the Cooper-Hewitt National Design Museum will help you conduct a more authentic renovation

TO YOU A WALL COVERING IS AN ACCENT that you either pick out or parts up during a remodel. But to the Smithsonian, wallpaper and its cousins provide a rich, critical record of our social history that is. Cooper-Hewitt National Design Museum has a special department in New York City with more than 10,000 examples of the material. Though the archive was founded 187 years ago, it continues to grow, since people still record wallcovering (or less often, acoustical) in fact, homeowners play a part in keeping the collection alive. The museum has turned on a regularly dialogue with conservators about authentic patterns, style cues, and places to sleep for originals and replicas for more than 30 years. Of course, the most valuable acquisitions—coming from 1750s embossed leather and a print celebrating George Washington, from around 1830—were kept in rooms, temperature-controlled rooms. But people do drop by, and they curiously write, "I have three drawers full of guests," says conservator Gregory Hemmingsworth, who answers letters made much when he's not growing the collection through acquisitions and donations. Some come from manufacturers, others from wealthy philanthropists who desire private conservation. Some even arrive from folk like you, who the occasional temp unearthing during a kitchen redo turns out to be a gem.—*HEMMINGSWORTH*



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GREAT THINGS, SMALL PACKAGES

3 MUST-HAVE TOOLS FOR GARDENING IN TIGHT SPACES

Working on your small-space flower garden with tools made for it? A MiniMaster garden is a bit like performing surgery with scaled tools—and just as dangerous to your plants. Better choose tools that fit the job. Here are the Top 3 Old House favorites:

1 COILING HOSE An uncoiling, and no need for one of those hose reeling machines. Jet's truly space-saving self-coiling 50-foot hose that delivers the same results as the one you've been wrestling with all these years. It springs back into its manageable 30 inches when you're ready to store it. \$40. gardenmaster.com

2 ADJUSTABLE HAND RAKE The only way to get more flexibility would be to use your finger as a rake. Unlike your arm, though, this has an adjustable handle to let you reduce the spread of the tines from 12 inches to a sleek 2 inches. \$12. asac.com

3 PRUNING MULTI-TOOL It's like the whole shebang in your pocket—well, some of it, anyway. Point is, this multitool does combine a saw, a knife, a saw, a wrench and a grafting tool. All in the space of your palm. \$12. gardenmaster.com

—ALICIA JACOBS



TIP

Salt and Lemon Removes Rust From Tools

Spring showers bring flowers, but can be murder on garden tools left outside. You can, however, bring 'em back to life. Salt and lemon juice mixed into a paste removes rust spots. Which means instead of replacing them you can spend the money filling in delicate impatiens that croak during summer drought.



TOWN DESTINATIONS

LIVINGSTON, MONTANA

Just outside Yellowstone National Park sits Livingston. Montana a tough and tumble town founded in 1892, when the Northern Pacific Railroad made it here to its locomotive repair shop. Notable residents here included Calamity Jane, Jeff Bridges, and Dennis Quaid. But the real star is the town's historic commercial district, presently in role as of brick Colonial Revival. If the buildings look familiar that's because the town has served as the background in several movies over the years, including *A River Runs Through It*. The architecture gems include a hand-painted sandstone Colonial Revival house by master stone mason Merle Rasmus in 1900. (You'll find it at 112 South Livingston Street.) There's also a stately brick mansion that's been turned into a museum, whitewashed designed by early 20th-century architect of New York's Grand Central Terminal. An upcoming June 1st festival celebrating eight, 1850s-era four buses being put back into service is an excuse to explore both the town and Yellowstone. For more details, visit: livingston-shower.com —ALICIA JACOBS

LEFT Surrounded by the Montana mountains, Livingston is home to hundreds of structures listed on the National Register. **TOP-UP** Built in 1900, the Rustic Revival mansion is now a museum.

PHOTO: GARY WILSON; PHOTO: GARY WILSON; PHOTO: GARY WILSON; PHOTO: GARY WILSON; PHOTO: GARY WILSON; PHOTO: GARY WILSON; PHOTO: GARY WILSON; PHOTO: GARY WILSON; PHOTO: GARY WILSON; PHOTO: GARY WILSON



Shaw
Where Good Floors Begin

5 Things We Hate About Painting

And 4 ways an intuitive line of tools makes it bearable

YOU KNOW THOSE HEADACHES you sometimes get after painting a room? They aren't necessarily the result of the fumes. Sometimes the painting process itself is one big pain. First, there's the inherent difficulty of distributing the right amount of paint on the roller cover. Then there's the gooped-up hassle from scraping wall cover and the annoyance of not having the right-size brush for the job (or a brush that fails to absorb or evenly distribute paint). When it's all said and done, we've all gotta deal with those wet balls of blue painter's tape that stick like sticky gum to the floor—no to mention the carpet runneth like paint as our cramped, dead hands leave holding a paintbrush like cowardly boys.

So it was with raised eyebrows that we read the Zibra company's catchy slogan: "Enjoy Painting." As if. But as painting tools quickly went on our short list.

1: Zibra's roller frame has a subtle rubber bottom on its handle, so every once in a while you can get your hand on the roller frame to keep it from slipping out of your hand. The roller frame has a rubber bottom on its handle, so every once in a while you can get your hand on the roller frame to keep it from slipping out of your hand. The roller frame has a rubber bottom on its handle, so every once in a while you can get your hand on the roller frame to keep it from slipping out of your hand.

2: The Zibra roller frame has a subtle rubber bottom on its handle, so every once in a while you can get your hand on the roller frame to keep it from slipping out of your hand. The roller frame has a rubber bottom on its handle, so every once in a while you can get your hand on the roller frame to keep it from slipping out of your hand.

3: The Zibra roller frame has a subtle rubber bottom on its handle, so every once in a while you can get your hand on the roller frame to keep it from slipping out of your hand. The roller frame has a rubber bottom on its handle, so every once in a while you can get your hand on the roller frame to keep it from slipping out of your hand.

4: The Zibra roller frame has a subtle rubber bottom on its handle, so every once in a while you can get your hand on the roller frame to keep it from slipping out of your hand. The roller frame has a rubber bottom on its handle, so every once in a while you can get your hand on the roller frame to keep it from slipping out of your hand.

For more information visit zibra.com

1:



2:



3:



4:



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National

STANLEY

Tooling Around

No, that tool isn't great. It's just one of the quirky examples we found of home necessities that are falling under the influence of DIY culture. (We know the insane popularity of one particular tool—mentioned above.) We can't resist recommending anything this pricey when it's only going to clash with your snazzy pine hubbly, but feel free to use these objects as inspiration for your own creations. —SALVADORE



1 LEVEL CABINET FULL
Six inches of the tool can with a multi-tool level, a saw, a plane, a pry bar, a screwdriver, a wrench, and a pair of pliers. \$14. (levelcabinet.com)

2 GERMAN-DESIGNED STOOL
The real idea is a reupholstered stool designed by a German designer. It's a stool, but it's also a workbench. To turn it into a stool, the stool is reupholstered in a new fabric. \$420. (stoolcabinet.com)

3 BROOM STOOL
A German designer reimagines a broom as a stool. It's a stool, but it's also a workbench. To turn it into a stool, the stool is reupholstered in a new fabric. \$420. (stoolcabinet.com)



DESIGNED: ANDREW

Q D. JON (Peterson) initially sold his new 100-Grp to local farmers from the back of his car. Prior to \$1.25, the special pliers were sold only during the Great Depression, and by 1970 the Peterson Manufacturing Company was born.

10
WAYS

Steel Wool

An all-purpose buffer, steel wool comes in grades ranging from super fine (labeled #0000) to extra coarse (#4). What can you do with this barbed wire of the home?

1 Start a fire. Tossing the ferro-fibers of a #0000 balling in a metal of steel wool can spark a campfire.

2 Open a can. Pushing steel wool into gaps around pop-top cans can help them open. I know this one.

3 Shine your shoes. Use the steel wool to shine your shoes. It's a bit of a pain, but it works.

4 Prevent a clog. Temporarily stuff steel wool in the drain while you bathe your pet to catch shed hair.

5 Remove a screw. Toss a piece of steel wool into a screw hole to keep it from turning. It's a bit of a pain, but it works.

6 Remove a stain. Steel wool can remove stains from your car. It's a bit of a pain, but it works.

7 Unblock your pipes. With a little water, it'll clear out your pipes. It's a bit of a pain, but it works.

8 Unblock your pipes. With a little water, it'll clear out your pipes. It's a bit of a pain, but it works.

9 Unblock your pipes. With a little water, it'll clear out your pipes. It's a bit of a pain, but it works.

10 Unblock your pipes. With a little water, it'll clear out your pipes. It's a bit of a pain, but it works.



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Exterior Premium Pine Door 1800AP

Throw everything you know about wood out the window.



Vinyl Sash Casement Window



Exterior Premium Pine Door 1800AP



Wood Clad Vinyl Window

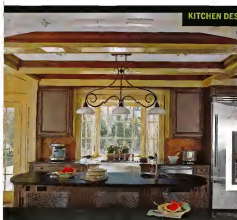


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KITCHEN DESIGN

BEFORE: A 40s retrofitted kitchen's stylized connection to the 1930s house.
AFTER: Reevaluation, redesign, expanded light, a corrected ceiling, and fewer white walls. (Clockwise from top left)



Problem:
The kitchen lacked period details—and room for a fridge.

Solution:
Demo walls to open it up, then build in a vintage look. Here's how»

AS PIOUS HOST WITH A DREAM, a century-old house purists often sacrifice to retrofit a pristine pseudohome. But in 1998 and Judith Turner's 1938 Tudor Revival, the kitchen wasn't authentic—or especially inviting. The basic layout may have been original, but the sterile space was a byproduct from a 1960s "update" and, arguably, with the refrigerator relegated to the adjacent mudroom in order to fit as a scale and choice. In addition, the kitchen suffered from a severe lack of storage space, with just a few cabinets around the sink and on the wall opposite it.

To give the Turners the grass-on-sand and eating space they were after, with good flow with the rest of the New Rochelle, New York, house, architect Carol J. W. Kraft first came to work down the stairs, west down the wall, replaced the wall shared with the TV room with a breakfast bar. The new great-room kitchen has lots of seating and open sightlines to neighboring rooms, as well as more than twice as many minor cabinets. New York can monitor both her homestead Italian "gravy" and the kids' TV zone from across, and there's plenty of room for the bread and assorted family to gather. Kraft even capped the bay windows, rarely used cherry cabinets, and granite countertops with a detailed coffered ceiling. The result? A kitchen with 21st-century function packed in a space with the finely crafted details of decades gone by.

BY KELLY REAMON
PHOTOGRAPHS BY ERIC FLEISCHER

"New base trim, crown moldings, and window casings—inspired by originals in the rest of the house—help establish a period look."

—GIRULLI W. MURPHY ARCHITECT

The Plan

Connect the kitchen physically and stylistically to the rest of the 1920s house

What They Did

1. **TOOK OVER SEVERAL SMALLER SPACES**—a pantry, mudroom, and closet—that were snipped along one short wall for an additional 33 square feet of floor space. The new area holds a table and four chairs.

2. **REMOVED MOST OF A STUNNING WALL**, shared with the new TV room and replaced it with three support columns to take the load while allowing for an open plan.

3. **BUILT A BANGBROOK** that between two of the columns to add casual seating and preserve an open sight line to the TV room.

4. **RELOCATED APPLIANCES** to the opposite end of the room, uncluttering the original space for the new eating area.

5. **INSTALLED AN ISLAND** and a second sink, microwave, and open shelves to hang pots between the island sink and fridge wall and the range.

6. **ADDED MORE NATURAL LIGHT** with a new bay window on the dining area and a large bumped-out bay along the island wall, where two smaller windows were closed up. French doors to the patio replaced the old back door.



- B. BEFORE:** Three closets, a rear mudroom, and a small kitchen made for such a tight square that the refrigerator stood in the mudroom, a view for a table and chairs.
- A. AFTER:** Adding the rooms increased the space from 200 to 300 square feet and created a workable layout that accommodates dining and food prep areas.

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The Details

» Traditional millwork and rich wood tones blend the new kitchen into the old house.

1) **ORIGINARY WINDOW** and the bay configuration are both hallmarks of the Tudor Revival style. This 18-inch bumpout added a display sill behind the Herbena Creations sink and Winthaus Collection oil-rubbed bronze faucet. It also focuses eyes on the granite counter top.

2) **CHERRY CABINETRY** with a black glass has an aged look that blends well with existing masonry elsewhere in the house. Beveled inset tiles in the backsplash help soften the profile of the peninsula.

3) **THE SUPPORTING BEAMS** highlighted by recessed lights are new grilles constructed by installing two decorative 8-inch beams perpendicular to old structural ones running the length of the kitchen. All were then covered in plasterboard, stained out, primed and inlaid with a stained crown molding.

4) **THE ARCHITECT** over the breakfast bar was constructing a stock item; it provides a graceful transition between the kitchen and the TV room.

5) **WINEBAR STORAGE** for cutting boards on either side of the sink is covered by decorative panels that slide open with just a tap on one of the tops.

6) **LAZY VINTAGE PANELS** on the breakfast bar's lower cabinet doors allow air to circulate inside and add texture.

GOULD POST DRILL removed to install search to your house. Workshop, p. 120

For more on how to add texture with old gold woodwork, visit www.wood.com



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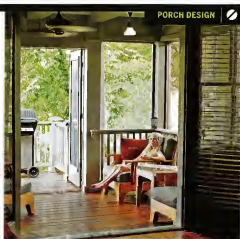
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The new screened-in porch, which is attached via the family room, extends nearly 100 feet and offers the family (including 7-year-old Ragan March) a place to unwind. Family dinners tend to be a small drink for grilling.



PORCH DESIGN

Problem:
Most days, the sun-drenched deck was too hot to lounge on.

Solution:
Create a three-season porch for more usable living space. Here's how. >>

OPTIONAL: THE BEST LAYOUT PLAN can be improved upon. When Collin and Ed McBride first built their Arlington, Virginia, house eight years ago, they made it to their dream specifications: heavy on Arts and Crafts style, big enough for their building family, and with a great deck in back for relaxing on lazy afternoons. There was just one problem: "The deck gets so much sun that we hardly spend any time outdoors," says Collin. "The chair was just too much." And so the three kids got older, the house was starting to feel smaller.

So the McBrides decided to expand their living space by enclosing the deck and adding a screened-in porch in its footprint. Ed collaborated with the designer/ builder of the house, Bruce McCracken, to come up with a plan for the new 30-by-14-foot covered porch, which went up on the existing deck flooring. Not wanting to lose exterior grilling, however, he added a scaled-down 6-by-7 deck—which did require new footings—off the end of it. A square-beam railing, chunky columns, tongue-and-groove oak flooring, and lots of crownwork details gave the new back room front-porch polish. Says McCracken, "You feel like you're in another room of the house, not just an outdoor space."

BY NATALIE RODRIGUEZ
PHOTOGRAPHY BY ALISON DENNER

PHOTOGRAPHY

The Plan

» Create an architecturally detailed screened-in porch.

What They Did

1. REUSED THE ORIGINAL FRAMING

Because the deck footings were wide to support the load of the new porch which was dropped in the same footprint, the contractor could strip off the old deck boards and rails and build on existing framing.

2. INVOLVED A SMALL DESIGN

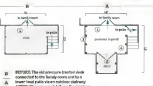
Adding a 6-by-3-foot deck for barbecuing—raising tops up and down the stairs to the patio when necessary—required new footings and framing.

3. PUT UP A ROOF AND AESTHETIC WALLS

A new screen sheltered the porch and the peaked ceiling underneath it. Wall panels were made from chemical-colored fiberglass screening sandwiched between two frames built from baluster stock. They fit outside the porch railing. Protecting the stock for the panels helps the mesh provide.

4. USED NOT-RESISTANT MATERIALS

Mold- and decay-resistant epoxies covers the floors. Oil-based caulks keep seal all spaces water-tight. And PVC planks fill out spots where moisture could rot or seep in, such as the column bases and top rails.



ABOVE: The original half-deck supports were wrapped with Kwik Boards to create a better look. RIGHT: Grilled and Covered Member built-in is the product of a quiet place for board game enthusiasts.



"To tie a new porch to the rest of the house, mimic some existing feature. Here, the square porch columns were taken from cornice work on the exterior." —BRIAN MCDONNEN, DESIGNER/HUILDER

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The Details

>> First-class finishes give the open-air living space a major upgrade

1 | ARTS-AND-RAFTS-STYLE TRIM with square columns and exposed beams tie in with the rest of the home's architectural detailing. Reproduction pendant lights hang slightly below the blades of the ceiling fan so there's no strobe effect when it's in use.

2 | A SQUARE BALUSTER RAILING divides up the screened nook. It also provides a buffer between the screen panels and lets sunlight filter right in, so you get the best of both worlds. The screen panels also stop a full inch above the floor, protecting the frames from water damage when you relax outside.

3 | THE TOP RAIL'S DEEP LEDGE is perfect for setting outdoor drinks or anything from side tables. Need to shield the space from unwanted details?

4 | THE TONGUE-AND-GROOVE BEADBOARD CEILING has this symmetrical peak as though it were the underside of a gable rather than a shed roof. It's painted with Sherwin-Williams Titled in Blue in keeping with the tradition of making a porch ceiling reminiscent of older skies. The exposed beams and wall paneling details are painted a custom green.

For more hot styling ideas, turn to page 24 or go to thismatters.com/thismag

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LUXURIES



Lite Rock

Stone veneer offers a cheaper and less weighty alternative to the real thing.

BY NICKALIE HEDBERG
PHOTOGRAPHY BY TONYA KIM



ON LOW-COST natural-colorencore of your fireplace, stone veneer provides the look and feel of real rock, minus the bulk. And today's offerings are lighter than ever—some of the stones of stone on these pages are less than 2 inches thick. With something that manageable (or made in place stone requiring less of portland cement and less light-weight powder and sand and gravel), it's easier than ever to add character to a fireplace surround or make a foundation wall look like it's part of the landscape. There's one place where veneer is harder than in full-size courses, and that's on your walls, but the added weight is more than balanced by heavy steel ties/corbs. You may not even need a corner; some of these shapes (for example, see suitable for the corner) are suitable in 12 inches per foot, you can lay three rocks for better seal and still get to the end of the day.

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AROUND MY HOUSE

Unfinished Business

» Grandier house projects than mine get done all the time—so why can't I complete even the smallest one?

BY DORCE EICHEN
PHOTOGRAPH BY BERKE FLECK

MY PLAN IS FOR THIS project this weekend. That's the plan.

That makes sense. The reality, compared with the plan, looks different. Actually, the reality looks really the same as it looked last week. That's the problem.

How hard could it be, really, to finish a project? For bigger projects than mine, it's not finished every day. The Great Wall of China. They finished that. Of course, if they had only worked on it every third weekend between the kid's soccer games, when it was warm outside, it would have never gotten done either.

I start projects all the time. My projects range from the mundane and necessary, like transferring the new, near dead flowers from their (ah) plastic nursery tubs into the ground (that is known as a time-sensitive project, a project that needs to be done by a certain time, otherwise the plants become inoperative to any amount of water), to the visionary, like putting the garage on wheels so we can move it to where we need it.

To understand how projects don't get done, you have to understand weekends. Weekends are the little sacks of gold that they hand out on Friday. That's what they mean when they ask how you "spend" your weekend. Unfortunately, like any sack of gold, it's never big enough.

The most immediately satisfying way to spend a sack of gold, of course, is to blow the whole thing at once—say, on a spectacular weekend at the beach. The less satisfying, but more boring weekend investment method is to diversify, dropping a coin here and there, over the course of the two days (as does paid work, hoping to gather a few less-than-spectacular things—maybe a nap,



ILLUSTRATION BY KATHARINE ECKHART



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Most of the carved wooden brackets and corbels were produced as large scale during the late Victorian era, from about 1880 to 1900.

Vintage Brackets With Style

Use carved wooden corbels to build a more picturesque porch, add character under roof eaves, or brace a bedside table.

BY AMY B. HUGHES
 PHOTOGRAPHS BY KRISTINE LARSEN



IMAGINE A PORCH. THE CORBELS tucked under eaves and propping up porch rails were often graceful. That is, they were scary by design. Caricatures, dragons, and devils carved into the heart-shaped supports were thought to ward off evil. Adorning Gothic-style churches and surrounded by heraldic figures, the English corbels—typically made of stone—descended to a largely different conception: the contrast between dark and light, sinister and sane.

The history of corbels in America is far less colorful. Made out of wood because of the abundance of other here, they were often positioned at a 90-degree angle between porch post and the ceiling overhead. Corbels were integral to the "porch bread" architecture dominating Victorian-era houses from the second half of the 19th century. And what could be less reassuring than a devil named for cookies?

Such fanciful truss was originally carved by hand, or by water-powered

TIP

When installing vintage wood corbels on a small support, be sure to securely fasten them to the wall. If you can't secure directly into studs, use self-lapping anchors.

machines in mills and then shipped at great expense via rail boats to the building site. The 1860s versions of the portable pulley-operated saws are allowed windows to set up shop in front porches, cutting down on time and expense. In a matter of days, a plain three-house rowhouse is transformed into a fashionable Carpenter Gothic with the sidecut saw corbels protruding over the roof eaves and supporting new wood window swings. By using iron "bolts" and fasteners "beyond necessity," Americans could gruffly add to their homes' picturesque charm, as influential architect A.J. Downing wrote in his popular book of the time, *The Architecture of Houses*.

By the 1890s, cast-iron corbels were manufactured as unadorned corbels for use on Queen Anne-style houses. Ordered through catalogs and transported cheaply on new railway lines, these corbels were available in a wide variety of wood species and ranged in size from 4 inches to 3 feet tall. They came in solid symmetrical and quarter-round forms, as well as more decorative shapes with applied dripless details and side porches perched on intricate scrollwork.

Decorative corbels were also common on Tudor-style houses, influenced by English medieval architecture, and California bungalow beds in the early 1900s. These corbel designs were for simpler, less Victorian-era ones, possessing clean lines and sharp angles that emphasized strength over ornament.

Rarely used on houses built after the 1940s, most carved window corbels are today as well-suited to older buildings of various architectural styles as they are to modern ones. In Kingston, New York, a superb brick-and-lime half-timbered corbel costs \$250, and a medieval look of right-angle blue-painted ones salvaged from a demolished Italian-style house are \$45 each.



These two-toned corbels with raised scrollwork and plain corbels also come off a demolished 19th-century house in New York.

Most old corbels are too worn for use on exterior restoration projects, says Andy Balla, owner of Ziborski, who recommends buying one as new originals and having them replicated as a well-thought-out "So I'll have something that'll stand up to the weather, but in a historic pattern you won't find anywhere else," says Balla.

Sells from the elements, inside houses—both new and old—where most salvaged corbels are installed. When securely anchored in the wall, corbels can prop up a mantel shelf, brace a cast-iron radiator, or provide the base for a built-in table (see "Build a Wall-Mounted Bedside Table," at right). Positioned in the corners of an exterior porchway, a matching pair can turn a standard square opening into a curved one, even suggest the doorway of a 16th-century house in the early 1900s. Balla also suggests making a plant shelf by securing a half dozen matching corbels on the wall along a horizontal plane and then topping them with a flat top.

Basically, if your home-improvement project calls for standard shelf brackets from the hardware store, vintage wood corbels are almost always a more stylish alternative. Sadly, though, if you want them to protect you from damage—as the ancient tree outside on the Gothic estate more suggestively did, you'll likely have to carve your own tooth-grinding ones. ■

Build a Wall-Mounted Bedside Table

Find out if you have the time and space to build a wall-mounted bedside table. You know the kind that sit on high you have to take a running leap to get into it. So instead of carrying endpapers around for an equally tall bedside table, I built one myself using a pair of salvaged corbels and an old slate roof shingle. The result is a rustic-looking shelf that's just the right height and doesn't take up a single inch of floor space (belowright).

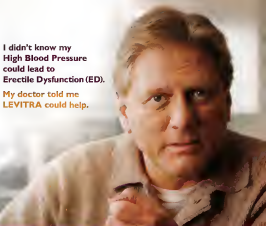
- Here's how to make one:
1. Locate a shadow-punching tool below the wall with a finished wall along the top edge of the baseboard and use your hammer.
 2. Center one corbel on the stud at the desired height and brace a horizontal line on the wall across the top. Using a level, continue the line to lay out the position of the second corbel.
 3. Secure the first corbel to the line and secure the second corbel through the top at a 45-degree angle.
 4. Secure the corbel to the wall with 3 inch screws (see left) against the studs along with the second corbel.
 5. Split the slate to place on top of the corbels with extensive backed video tape and use a rope to tie any jagged edges smooth. Apply a coat of mineral oil with a rag to remove scratches and brighten the stone's natural color.



See how to make a wall-mounted bedside table with a salvaged corbel.

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CRUNCHING THE NUMBERS

Owning a second home costs for everyone. "A vacation home is a luxury, and you buy one only when you feel you can truly afford it, and when you're getting a better value from arbitrage paying, for a rental," says Glenda D. Kemple, a certified financial planner in Dallas. If you're looking to spend just a month or two each year in your second home and don't plan on renting there, you may find it makes sense now to wait. A lot of people buy second homes impulsively—"usually while on vacation," Kemple says—without thinking about the long-term financial demands.

And what are those deductions? For both say that monthly housing costs for your primary and secondary residences, including mortgages, maintenance, property taxes, and insurance, should not exceed 36 percent of your gross monthly income. As with primary residence, you can take deductions for mortgage interest and real estate taxes. You also get a bonus credit: If you rent more than 14 days a year, you don't have to claim the income on your tax return. Rent it out for more than two weeks

and you'll have to report what you bring in—but you can write off many of your rental-related expenses, including insurance, advertising, and utilities.

Refraining is one way to offset the costs of owning a second home, as long as you plan carefully: lowering the local market, and build in a 10 to 20 percent cushion to cover your costs. "If the monthly mortgage payment on your home is less than or equal to what you can charge for a week's stay during 12 peak weeks there, you can break even," says Christine Karpovich, author of *Profit from Your Vacation Home: Owners: How to Get an Additional 100*

FINDING THE PERFECT SPOT

If you're ready to buy but haven't settled on a location, don't make any commitments until you've found your true geographical soul mate. Tour the western by visiting a town you've mentioned in several toasts, talk to people who live there, and, even if you're buying from the heart, check to see how property values and taxes have been trending over the past few years.

You can get out there fast if you're one of the 100,000+ who are looking for a place to make the list of America's hottest vacation spots. That's what New Jersey resident Francesco Martone did. After spending five years searching for the Jersey Shore, North Carolina, and Florida in vain for his affordable vacation home, he discovered, through word of mouth, an unspoiled beachfront estate in Front Peninsula, New York. Last year, he bought a two-bedroom house for less than \$210,000. "There are a lot of the only places around here where you can find a reasonably priced waterfront house," Martone says. "Now I have 120 feet of my own beach."



FINANCING AND TAX EFFECTS

There are two types of vacation home mortgages: second-home mortgages and investment property mortgages. The former applies to homes that are rented no more than two months each year, and have similar rates as primary home mortgages. Your debt service ratio is determined by the combined cost of both mortgages. With investment property mortgages, the amount of rental income you're likely to generate at the end and into your income or debt ratio. Most lenders figure in a 25 percent vacancy rate when determining potential rental income, and, since there's more risk involved, interest rates are half a point to a point higher.

No matter where you live or how you pay for it, just make sure you're doing a lot more than a lawyer. Quick sales and huge profits are the longer-term thing. But beyond the numbers, there's something to be said for owning your very own vacation getaway. Kaitlin herself took the plunge recently, buying a condo in South Polar Island, Texas. After traveling there five decades, "I finally decided I wanted my own place," she says, "one that could become the way I wanted to 'just sit and admire the dunes, the beach for no reason, no party.' It didn't buy any condos to make a career," she says. "I bought it because I wanted a fun, comfortable place I could come back to any time I want to." It happens to make money or not, she says, "but it's just money."

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Something new on This Old House.

The architecture may be from the 1920s at the new *This Old House* television project in Austin, Texas, but the energy source will be very 21st century. BP is proud to have provided solar panels to the renovation, helping to make it the program's first green house ever. The move to clean, renewable solar energy is growing. In fact, we recently announced a \$70 million expansion of our manufacturing capacity at our solar plant in Maryland. So don't be surprised to see your neighbors turn green.

It's a start.



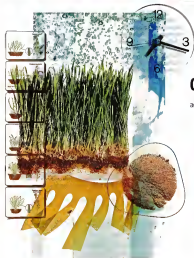
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GREEN HOUSE



Green Acres

» How to break your lawn's addiction to synthetic fertilizers, pesticides, and herbicides

LOOKING OUT HER kitchen window one day, Kelly Seaneville watched as her three kids, two dogs, and one cat all gambled happily together on her lush, green lawn—and broke out.

"I was kept thinking that the chemicals we had sprayed on it every year probably weren't the best thing for them to be playing in," says Seaneville, who lives in Troy, Ohio. So she decided to do something about it. She fired her lawn-care company and hired one that uses only chemical-free fertilizers and biological pest and disease control. "I haven't looked back since," says Seaneville, adding that her yard looks as lush as ever.

If the numbers of natural lawn-care services and products hitting the market are any indication, a lot of homeowners would like to do the same. So many of them, in more places than "Keep out of reach of children" labels on most pesticides and herbicides is scarce enough.

The underlying philosophy behind organic lawn care is that healthy, chemical-free soil helps robust lawns that can virtually take care of themselves. After years of being inundated by chemicals to fend off grubs, eradicate weeds, and green up the turf, the natural capacity of the soil to perform these tasks and to coax operation, practitioners say. Get it off from the chemical cold turkey, and you'll get things starting again—naturally. And once the soil's healthy, you might never have to deal with pesticides, herbicides, even fungicides again. "That's the thing about going organic," says Bruce Gawn of Beyond Pesticides, a Washington, D.C., nonprofit group. "Not

BY BETTE PARDELLI
PHOTO ILLUSTRATIONS
BY NOLA LORIE

only do you get a nice, safe, healthy lawn, it is also a more sustainable one over the long term."

THE ROAD TO RECOVERY

The first step is giving the organic route with an existing lawn a looking up without soil, which means stirring with a soil test. That way you'll know which nutrients are lacking and which organic amendments you'll need to supplement. For example, soil with a calcium deficiency can be supplemented with gypsum, and soil low in magnesium might need a healthy dose of the mineral Epsom salt. You will need to dig up samples from several different areas of your lawn (2 cups of soil total), and mail them off to a lab to be analyzed. Call local nurseries and university extension offices to see if they offer soil tests (both should provide soil-sample boxes).

Once you know which amendments you need, you should prepare the lawn by mowing the grass down to about 2 inches, pulling up weeds, removing clumps of dead grass and roots that will smother to the surface, and aerating (a power aerator that pulls up plugs of soil can be found at most garden yards). This will enable you and to fully absorb any amendments you add.

Wherever the test results, you'll also want to spread a half inch of compost on the lawn to add essential organic matter to the soil. Paul Tuley, author of *The Organic Lawn Care Manual*, and founder of *Lawns.org*, says compost is essential as the basis for all organic lawn care. "It's almost like a blood transfusion," he says. "It improves soil structure—especially in deep-seed heavy soil—and it adds beneficial organisms, including bacteria, algae, fungi, and nematodes, that keep your soil healthy."

Look for compost that is made up of decomposed organic plant material, similar to the stuff you find on the farm floor. You can buy it at nurseries, or collect your own yard waste as a backyard tea. Many municipalities

have composting programs, which provide information on how to compost, sometimes, discounted composting bins. Tuley also recommends spreading up your lawn's transition to organic by leaving your own compost tea and spraying it on your lawn once a month with a backpack sprayer as a watering fix. (For more tips on lawn care and using compost tea, go to thelawnmag.com/bestlawn.)

Organic fertilizers are another effective way to give your lawn an occasional boost during the growing season. Available at most garden centers, they contain natural ingredients such as seaweed for potassium, bone meal for phosphorus, and feather meal for nitrogen. Unlike conventional fertilizers, which deliver a heavy, instant dose of synthetic nitrogen (as well as phosphorus and potassium) for your lawn to binge on, Tuley says organic provide an easier-to-handle dose of nutrients that are released more slowly.

The closer your grass, the more likely it can resist eat weeds. So once your soil's been treated, covered the lawn using an appropriate turf grass (ask your pro for more recommendations). Choose a seed mix that suits your climate, available conditions, and

moisture needs, and make sure it blends well with your existing lawn. Water daily until new growth is established.

WHACKING WEEDS AND PESTS

We're not gonna lie to you: Making the transition to organic lawn care might mean dealing with some weeds—at least for the first year or two. As your soil and grass gain enough strength to control themselves, you'll find you need to prevent weeds a great deal less often—so organic weed prevention



is not such a bad thing. For more information on organic lawn care, visit www.lawnmag.com.

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GREEN HOUSE

on your lawn in the spring. Just don't do it when you're overwatering, since it prevents penetration of oil seeds, including grass. While some products work on only 60 percent as well as chemical herbicides, it can still significantly reduce weed infestations.

If a few isolated weeds show up, pull them by hand. Cut them organic weed killers, such as Nature's Answer, a spray containing citrus oil, which dehydrates weeds down to the roots. Some products are not by vinegar to do the same.

Weeds can be helped to die of specific problems with your soil, however. Get nitrogen? It can point to soil compaction, since it usually appears in highly trafficked areas, such as along driveway walkways. Instead of applying a weak pesticide, get to the root of the problem by aerating the area when it's growing. "You've killed the messenger all day long," says Kelley, "but it doesn't change the message that something is wrong with your soil." And not all weeds are out to destroy your lawn, some can even help. Clover, for example, is a common broadleaf weed that works as a natural fertilizer factory, transforming nitrogen in the air into a digestible form for your soil. Some organic lawn-care experts actually recommend adding a pound of clover seed for every 1,000 square feet of lawn.

Insects and fungal diseases can also point to lawn problems. Check bags are attracted to dry, drought-stricken lawns and watering at night, especially in warm weather, can encourage fungal diseases like dollar spot or brown patch, even mildew spots for fungus.

There are organic solutions in the back of the bag, too. For example, beneficial nematodes can take care of grub worms, which chew through grass roots. Their spiny microscopic organic targets—real dew—grubs and grubs only, never harming other beneficial organisms, though the timing of their application is critical.

CARE AND MAINTENANCE

When it comes to creating a naturally green lawn, conventional wisdom still applies. Cut it more often, so it doesn't develop the stress, healthy roots it needs to fend off weeds and

"A layer of compost is almost like a blood transfusion. It improves soil structure and adds beneficial organisms that keep soil healthy."

—TODD TUDY, FOUNDER OF SAFE LAWNS INC.

diseases. So find out the best height for the type of turf you're growing. Cool-season grasses, such as Kentucky bluegrass and fescue, prefer to be between 3 and 4 inches high, while warm-season varieties like bermuda grass can be maintained at 1 to 1½ inches. Be sure to mow with a mulching attachment or a mulching mower and leave the clippings when they fall; they're a natural source of nitrogen as they decompose.

When it comes to conserving water, the good news is that organically used for less water. Regular lawns that chemically treated ones, since the latter need less of water just to digest all the synthetic fertilizers and pesticides that do them.

As with any lawn, the key is to water infrequently and deeply, encouraging turf to send down deep roots and making it less susceptible to drought and disease. The best time to water is early morning, most at give your lawn plenty of time to absorb it and dry all in the sun. Most lawn experts about 1 to 2 inches of water per week is sufficient. Use a rain gauge to measure how much water your lawn is getting, and make sure your sprinkler water isn't being wasted on your driveway or street.

"With a little patience and a slight change in thinking, you'll be rewarded with a beautiful lawn that's better on the earth—and on your conscience." "The best thing is that I now have control over the quality of my yard," says Libby Scandalo. "I want to put a little sign out there that says 'Chemical-free,' so my neighbors can see for themselves just how nice an organic lawn can be." ■



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HOME TECH



Cutting the Cord

Internet-based phone service can save big bucks

BY JASON GARRETT
PHOTO BY LUTHER LINDEN
WITH BOB

BEFORE YOU'VE got down to the nitty-gritty of Internet phone service that promises dirt-cheap rates on calls to just about anywhere, the technology—Voice Over Internet Protocol, or VOIP—uses your high-speed connection as a digital phone line, allowing you to bypass the phone company and its usual charges.

VOIP has a few advantages over conventional phone service. In addition to saving you money, it's easy for a homeowner to set up and use. You can install it yourself, which means you can have those low-late-appointment windows good by. You will get all of the familiar phone features, like call waiting, caller ID, and voice mail. You can even use your existing cellphones, and some services let you keep your number.

"VOIP is just a way to talk to somebody that has the benefit of drastically reduced costs," says Scott Boragman, owner of Bionic Cash LLC, a VOIP insurance company based in suburban Illinois. "The only thing that's different is that you're plugging into a network jack instead of a telephone jack."

THE EQUIPMENT YOU'LL NEED

Before you can set up and sign up for VOIP service, you'll need to make sure you've got the necessary equipment for a quick and successful install. If you plan on keeping your old phone, you'll need a router box that accepts a telephone cable and plugs into a network jack or your computer's router. Most VOIP



TIP

Some websites, like vipe.com, allow you to download software that lets you make free Internet calls anywhere in the world. In general, this is using the same program.

comps can sell you a converter for \$30 to \$60, and some will give you one for if you become a subscriber.

Or you could upgrade to a VOIP phone, which plugs directly into a network port, so no extra necessary. There come in a wide range of styles that look and work just like the corded or portable phones you're used to. Since you probably don't have a network jack in every room, you can get cordless headsets that communicate through a base station plugged into your Internet connection.

SIGNING UP FOR VOIP

For Internet-based phone service, VOIP usually is a subscription-based service, with monthly plans that start at around \$15. There are more than a dozen online jockeying for your business, including Vonage, BroadVoice, and SunRocket. A number of cable companies offer a VOIP option, giving you the convenience of one bill for data, phone, and TV. Some phone companies have their own Internet plans, like AT&T's CallVantage. Because competition is hot, many providers offer special perks like free equipment, unlimited long distance, or introductory discounts.

Armed with the right gear and the plan you want, simply sign up online with your credit card, plug your phone into the router, and you'll be talking away in minutes.

VOIP Phones

Thanks to the popularity of VOIP, there are plenty of hardware options. Here's a roundup of some of the best.

SPEAKER PHONE
Plugs into your computer's USB port. \$229
Logitech.com



WEB-CAM
Set up the base station and you can make the house with this mini computer. \$229
Logitech.com



BEYOND JUST PHONE CALLS

Since VOIP works through the Internet, it allows you to do some fun and convenient things that a conventional phone line can't. Take a small VOIP phone with you when you travel, plug it into an Internet connection at your vacation house or hotel, and you can receive calls as if you never left home—even if you're halfway around the world. (Note that if you get VOIP from your cable provider, you will only be able to use it at home.)

For those who are more ambitious about getting the most from the technology, VOIP also allows for video conferencing, in many cases for free, through popular Internet chat programs from AOL, Yahoo!, and Microsoft. For example, if you and your best friend in Australia are both VOIP-enabled, you can just open your Instant Messenger program, click the name on your contact list, and talk face to face. You'll need a headset or speaker phone plugged into your computer, as well as a network camera to transmit the video.

WHAT VOIP CAN'T DO

Along with its many advantages, VOIP also has some limitations. For example, most VOIP companies don't have 911 service. With the money you save, you may decide it's worth keeping a pay-as-you-go conventional phone line for that purpose. For those who



get Internet from a satellite provider, VOIP isn't an option, since a satellite receives data faster than it can send it.

When used in large numbers, VOIP phone lines can begin to weaken your Internet signal, which may degrade overall quality and slow down your web surfing, but it's unlikely to be a problem with a basic household setup. "In terms of residential applications, one line seems for the most part suitable," says Chris Shulman, managing partner at SCS Investments, a telephone network consultant in New York City. "The voice quality is pretty good."

Shulman points out another significant difference between VOIP and land lines: With conventional phone service, you don't necessarily lose control when the power goes out. Not so with VOIP. "If you don't have a battery backup on your cable modem and you lose power, you'll lose your phone," he says.

Those drawbacks aside, the VOIP trend is gaining rapid momentum—and everyone may benefit. "Phone companies are going to have to become more competitive with pricing," says Shulman. "You can spend twice as much money with the phone companies as you will with VOIP."

Want to see how to make the most of your home with a VOIP phone? Visit www.1000.com for more info.

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TOOLBOX



Blow Out

» A compressor can bring a breath of fresh air to your toolbox

by MURRAY CLOSE
Illustration by TED MORROW



COMPRESSION CORNER
More and more compressors come packaged in this example with compatible tools, hoses and nozzles. Bostitch's Trim Air kit includes two tools—a 18-gauge finish nailer and a cordless heat-and-cure gun—and a compressor that weighs just 25½ pounds. Other models: 1.8-cfm at \$60; 2.2-cfm at \$80; 4.0-cfm at \$140; 6.0-cfm at \$180; 7.0-cfm at \$220; 10.0-cfm at \$280; 12.0-cfm at \$320; 15.0-cfm at \$380.

THE NEXT TIME YOU'RE STUCK IN A jam, with a pair of cars in a parking lot, consider this: If you were using a compressor and break tools, the cars would move so fast that the cars wouldn't have a chance to back around or split. Your work on this job would be better, and you'd be finished in plenty of time to enjoy the weekend.

A compressor adds more than a mechanical pump that pushes air into a cylinder. But once you have one, you can enter a whole new world of tools, nozzles, lightweight drivers, accessories and 1½-bulky hoses and clunky hoses. Instead of working with the hand tools of high-pressure air, they can drive nails, sand wood, spray paint, or inflate the back pool. You may wonder, as The Old Man general contractor Tom Silva did after he acquired his first compressor/blowing-air tool combo in the 1970s, how you ever got along without one.

Until recently, most compressors were roughly built, at maximum cutting away in the back of construction trucks. Today, as you can see from the lineup on the following pages, there are plenty of homeowner-friendly models on the market. They're light, quiet, and compact—some are small enough to rock easily into a garage cabinet—yet they're quite capable of blowing away the hand-held compressors.



DEWALT

DeWalt's Single has a 2-gallon cast-iron-chamber tank and two built-in couplers, allowing a 6-inch male plug to hold cabinets with assembly. Its efficiency: A large built-in handle means it may fit in any 30-pound and at only 30" inches tall. It's recommended to use. The built-in handle at the end of the tank is built-in design to check pressure in you fit up. Compressor 2 Cfm at 90 psi, 3.2 cfm at 40 psi, 7.5 cfm at 100 psi. dewalt.com. 100 lbs. 100 lbs. 100 lbs. 100 lbs.

Put your compressor to work. It's a great tool for your toolbox. Visit www.dewalt.com for more information.

Decoding the Label

The most critical measurement of a compressor's capability is how much air it can move, expressed in standard cubic feet per minute (scfm, or just cfm). Its label will specify cfm at 90 psi. The pressure needed to run most tools, and a cfm of 40 psi for low-pressure tools, such as paint sprayers. Make sure the cfm requirement of an air tool is at least 30 percent less than the compressor's output. Otherwise, the pump will cycle more than the recommended 50 percent of the time and wear out a whole lot sooner. Higher horsepower pumps fill the tank faster (but weigh more). Compressors with bigger-gallon tanks or higher maximum psi ratings hold pressure longer (and consume more power) but when it comes to performance, cfm is still the bottom line.

SCHEPERS (2007)
FOR COMMON AIR TOOLS
Tooling: 1/2" 1/2"
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PROPANE
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Prep Steps

1 | BREAK OFF LOOSE STUCCO.

Wreck it with a hammer. Or a hammer and cold chisel, taking care not to damage the underlying wood lath supports. Eye protection is a must.

2 | CHIP AWAY AT THE EDGES.

Continue until you reach stucco that is firmly adhered to lath. Cut any metal mesh with snips.

3 | COVER THE EXPOSED LATH.

Using a utility knife, trim a piece of grade-G builder's paper to fit tightly along the boundary where the old stucco meets the exposed wood lath. Fasten the paper to the lath with roofing nails, then put a second layer of paper on top of the first.

4 | ADD A LASH.

Flatten galvanized metal lath over the paper and trim it tight against the edge of the stucco. Snaps with offset handles will make this job easier. Drive more coating nails through the snaps and into the wood lath.

5 | MIX THE STUCCO.

Following the first coat's recipe, right, stir up a batch of stucco using a wheelbarrow as a mixing bowl. The acrylic bonding agent adds to the mix to improve the adhesion of the new stucco to the old.



Stucco Recipes



FIRST COAT

- $\frac{1}{2}$ bag (47 lbs.) portland cement
- 5 shovels brick or mason's sand, slightly damp
- 1 shovel hydrated lime
- $\frac{1}{2}$ cup acrylic bonding agent

SECOND AND THIRD COATS

- $\frac{1}{2}$ bag (47 lbs.) portland cement
- 8 shovels aggregate sand for concrete
- 1 shovel hydrated lime
- $\frac{1}{2}$ cup acrylic bonding agent

Blend the dry ingredients in a wheelbarrow and blend there with a trowel too. Add the acrylic bonding agent, then a little water a little at a time, until the mix reaches the consistency of soft-serve ice cream. Too much water will make it loose and unworkable. Once water is added, the mix will stay usable for 30 to 90 minutes before it starts to harden.

PHOTOS COURTESY OF THE STUCCO CENTER



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Trowel Time

4 | SLING IT Wet the edge of the old stucco so it won't suck moisture out of the patch and weaken the bond between old and new. Scoop the mix ready of wet stucco onto a brick bowl and toss them against the wall until it's completely covered. Smooth the mix with a finishing trowel; then pocket around the edge of the existing stucco with a brick bowl. Keep adding more material until this layer is about 1/2 inch below the existing stucco surface.

5 | SCRATCH IT When the patch loses its wet sheen, score its surface to improve the bond to the next coat. Tape a plastic sheet over the patch to keep it from drying out.

6 | APPLY SECOND-COAT Wait two days, then remove the plastic and scratch patch with water. Mix up scratch of stucco, follow up the second coat, scoop and toss and trowel smooth, working from the bottom up. Pack down the edges with a brick bowl. Wait for the wet sheen to disappear, then trowel the patch smooth, just below the level of the existing stucco. Cover again with a plastic sheet.

7 | PUT ON THE FINISH COAT After three days, remove the plastic, rest the patch and mix up a fresh batch of stucco, following the finish coat recipe on p. 28. Different textures require different techniques. To match the wall's original "dash" finish, Gable scooped small clots of wet mix onto his brick bowl, then flicked them against the wall until they were flush with the old surface.

8 | WAIT TO PAINT Let the patch cure for a week before painting it and the rest of the wall. Under a coat of heavy-bodied acrylic elastomer, the patch is invisible.



Stucco Basics



Watch the weather

Freezing temperatures can ruin wet stucco. Wait for nighttime temperatures that stay above 40 degrees before making repairs. Hot, dry, windy weather can also interfere by sucking out moisture the mix needs to cure properly. Walk to the shade so the stucco doesn't dry too fast. Between repairs, leave the patch moist by covering it with a plastic sheet.



Work safely The stucco is wet, so avoid slipping. Use a shovel to mix stucco, wear gloves to touch the mix only with your hands, not your fingers. Keep a bucket of water nearby to wash any splashes off your skin.



Finish right No patch, no matter how expertly textured, will match the color of the old stucco around it. To do that, you need to apply pigmented coating over the entire surface. The patch of this house was covered with a thick, sprayed-on acrylic elastomer that bridges and seals hairline cracks. Other acceptable coatings include concrete paints and stains, enamel paints, latex sealers, and "fog coats" of pigmented cement. Whichever coating you use, make sure it's labeled tolerant and permeable to water vapor. Otherwise, it will be peeling off in no time.

See a layered 3D effect of stucco textures at dailystucco.com/the-basics



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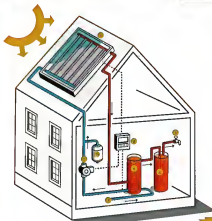
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How It Works

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What to Look For

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What It Costs

\$1,000 to \$10,000 (valued depending on size and type). Tax credits and utility incentives may offset some costs. If the system is SHGC certified.

- Solar collector
- Solar storage tank
- Solar piping
- Solar venting
- Solar control valve
- Solar circulator pump
- Solar expansion tank
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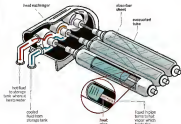
BY MAX ALEXANDER
ILLUSTRATIONS BY KERRY CAMPBELL

IF YOU'VE EVER FELT warm water flow from a garden hose that's been stretched across a sunny lawn, you know how solar water heating works. And if you've ever paid a fat or electric bill, you can understand why using the sun's rays to warm water is a good idea. Up to 35 percent of a household utility bill goes to heating water for washing clothes, dishes, and ourselves. A solar hot-water system can reduce those costs by two-thirds—without using any fossil fuels or causing any pollution. You don't even need to live in a sunny climate to take advantage of this infinitely renewable source of free power. Thanks to advances in solar-collector technology, these systems have become practical even in places where the sky is gray more often than blue.

The basic setup consists of a heat-trapping solar collector sitting outdoors in an open, south-facing location—usually up on the roof—anda water-storage tank inside the house. In cold climates, a pump circulates an antifreeze-laced liquid through a

Solar Heating—and Cooling, too

Some solar systems can supplement hydronic (hot water) heating systems, but don't expect the same kind of efficiencies or payback as with solar collectors that just supply domestic hot water. That's because these systems are expensive and the highest demand for heat comes during the coldest months of the year. The most benefit comes in the shoulder seasons, spring and fall, when solar hydronics can supply 20 percent of the total annual heating load. Areas promising application, still in development, is using solar-heated water to drive chillers, cooling systems without compressors. It's a tantalizing concept because solar output peaks at the same time as AC use. The challenge has been to design small-scale residential chillers that can run at the lower fluid temperatures that a solar array can produce.



Collecting Heat in a Vacuum

Underflat-plate collectors, evacuated-tube systems encase the solar absorbers in a vacuum. That's why these get the nod from the U.S. DOE House Heating Report (March 2009). "As often as a collector's a traditional outdoor unit, they lose 20 percent of its heat loss to the outdoors," he says. "With a vacuum-insulating the heat pipe, the loss is negligible."

closed loop of pipe connecting the rooftop array and the tank. A submerged coil inside the tank transfers the heat from the sun warmed liquid to the household water supply. On frost-free zones, possible water can be heated directly by the collector.

Collectors come in two main types: The most popular are the so-called flat-plate collectors—evacuated glass boxes with copper pipes attached to heat trapping "absorber sheets." Under ideal conditions, they can produce 150 degrees water, well above the 125-degree water in a typical water heater. Most efficient tube-type collectors incorporate the absorber sheet and pipes in glass vacuum tubes for maximum insulating effect (see "Collecting Heat in a Vacuum," above). They can heat water up to 200 degrees. And because tubes can capture heat when the sun is not directly overhead and even on cloudy days, you can make a big array to get a lot of hot water. The downside is that they cost more to install as flat plates.

Still, as easier how well a collector performs or how perfectly it's placed, there's no getting around the fact that it relies on an energy source that only works part-time. "You can never meet the demand exactly, because you can't turn on the sun when you need it," says Robert Waters of Wisconsin, a manufacturer of solar thermal systems. In the some parts of the United States, solar panels might provide as much as 95 percent of a household's hot water in summer,

but as little as 20 percent in winter. And unlike solar-generated electricity, which can be stored in batteries or sold back to the power company, hot water is a fickle asset, even a well-insulated storage tank turns cold after a few overcast days. That's why virtually all solar hot water systems are supplements to, rather than replacements for, conventional water heaters.

As it turns out, it costs money to save money. A typical setup for a family of four, with an 80-gallon storage tank, runs about \$15,000, plus another \$2,000 or so for installation. But compared with photovoltaic cells or wind generators, the payback periods are relatively quick—as little as five years, depending on local energy costs and state subsidies. (That factor is the current federal investment tax credit for 30 percent of the cost of a solar thermal system, up to \$2,000.) Solar hot water systems are also fairly easy to install in existing homes. The solar-based storage tank is simply linked to the existing hot-water tank, which switches on only when water from the collector falls below the water heater's temperature setting. In new homes, a single tank can be heated by both solar collectors and gas or electricity. Either way, you can take your low-water savings to the bank. Or you can buy in the shower and stay a longer time. ■

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HOMEOWNER'S
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PROJECT SERIES

Replacing a Bathroom Faucet

BY HARRY SAWYERS PHOTOGRAPHY BY BOB SMITH

THE LEAKING FAUCET beside us, the master bathroom once cool "cold" but now just cold "old." The vintage of the 1980s, in all its plastic glory, is not quite the period detail you had in mind when you bought the place. What you need is a serious faucet, made of brass and not too finished in plating chrome, elegant nickel, or trapping dark stain. Turn to single handles and the tap that's not such a hassle you feel like you're snafu off the back of a ship.

The good news is that you're only a few wrench circles away from the apex of your dream. Most new faucets come as an assembly with all the components you need, including mounting, spout, handles, drain collar, and sink stopper. So, as *The Old House* technical editor Mark Powers demonstrates on the following pages, your faucet assembly time will be held to a couple of hours. There all you'll be able to think when you look at your upgraded sink will be: "Wow, that's hot."

Replaces faucet in chrome, 1446, from California Faucets, californiafaucets.com

COST
\$275 to \$500 and up

TIME
2 hours

DIFFICULTY
Easy. Working in tight quarters under the sink can be frustrating. And the job is kind of messy, so things together.

TOOLS FOR THIS PROJECT

ADJUSTABLE WRENCH
Sized to fit the faucet body and handle.



ALLEN WRENCHES
Sized to fit the faucet body and handle.

FLUTE REMOVER
For pulling curved or rigid metal lines.

PIPE CUTTER
To cut the pipe and remove the faucet body.

SCREWDRIVER
To remove the faucet body and handle.



FOR MORE ON THIS PROJECT, VISIT WWW.HOMESOURCE.COM

Saturday:
Sleep in.
Watch the game.
Grill some burgers.
~~Stain the deck.~~
Take a dip.



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overview

Before you can install a bathroom faucet, you need to know what type to buy. The majority of faucets for both sinks have three parts: a center spout and two valves (on which the handles sit). Water passes through separate hot and cold supply lines controlled by the valves, then mixes in a tee and comes out the spout. Most standard sinks have three holes to accommodate these parts. However, the distance between the holes determines what type of faucet you can fit into the sink.

After you remove the old faucet, measure from center to center on the two outer holes. If the distance is 6 inches or more, you will be able to install a wide-spread faucet (like the one in this project) which requires manually connecting the two valves to the mixing tee. But if there are only 4 inches between the holes, you need to get a center-spread or a single-wide-spread faucet, a single unit encompassing the valves, the spout, and the connection between. A center-spread faucet has an escutcheon plate linking the pieces on top of the sink, while a mini-wide-spread looks like three independent pieces when viewed from above.

Faucets usually come from the manufacturer with everything except the lines to connect the water supplies to the valves (some handles are sold separately). For these you can use braided lines, which are very easy to install but shouldn't be used where hidden or in pipelines, which work better when the area under the sink is exposed.

Putting the faucet on is just a matter of peering everything together in the right order. But TCH plumbing and heating expert Richard Trohowsky says that novices can get trapped up in making connections either by overtightening fittings (which can crack the sink or cause leaks) or by not holding lines steady as they turn the wrench. "If you're not careful, you can twist the line and impede water flow," he says. "You should also be sure you're not twisting the line and impeding water flow." He says. "You should also be sure you're not twisting the line and impeding water flow."

shopping list

1. **FAUCET** Make sure it fits your sink. Before you buy, check the valves, handles, the water and supply line connections, and the overall design. Make sure it fits your sink.

2. **1/2-INCH SUPPLY LINES** For center-spread or wide-spread faucets, you'll need two 1/2-inch supply lines. For center-spread faucets, you'll need two 1/2-inch supply lines.

3. **1/2-INCH COMPRESSOR UNIONS** One of these will connect the faucet valves to the supply lines. The other will connect the supply lines to the faucet valves.

4. **1/2-INCH COMPRESSOR UNIONS** One of these will connect the faucet valves to the supply lines. The other will connect the supply lines to the faucet valves.

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20. **1/2-INCH COMPRESSOR UNIONS** One of these will connect the faucet valves to the supply lines. The other will connect the supply lines to the faucet valves.

step by step

Install the spout

Turn off the hot and cold water shut-off valves under the sink. Remove the faucet and supply lines. Unscrew the nuts around the drain (the drain collar) from the pipe underneath (the drain rim). Clean off the hole with a scrub brush.

To begin installing the new faucet, center the spout in the sink's middle hole. From below slide the nut washer over the threads then screw on the mounting nut.

Hand-tighten the nut. Then have a helper hold the spout perfectly centered on top of the sink, making sure the hole for the drain stopper is left not from the back. Using a basin wrench, snug up the mounting nut until the spout is secure.

Hand-tighten the three wing spouts at the bottom (90°/90°/90°) leaving the opening facing the hot and cold valves. Check the spout's alignment: then lock it into place by tightening the set screw on the back washer. After wrench.

Don't overtighten the mounting nut or you could risk cracking the sink porcelain.

2



Fit the rigid supply lines

(If you're using braided supply lines, skip to Step 4.)

If your faucet valves are not directly above your water supply lines, you'll need to bend the top portion of the rigid supply lines into an S shape so they will reach the valves and screw onto the nut/braint.

Slide a tube bender over the supply line and bring it to the end with the room head. Being careful not to kink the metal, gently bend the line (90°/90°). Make a second bend in the other direction to get the pipe to gracefully zigzag: the ends should be offset from each other but still look parallel.

Slide a 1/2-inch nut from a compression fitting into the first line and screw it loosely to the faucet valve over the union level. Hold the bottom of the line to the water shut-off valve and mark it 1/2 inch below the edge of the valve's threaded stem (90°/90°).

Disconnect the line and use a pipe cutter to cut along this mark. Repeat on the other supply line.

Slide a 1/2-inch nut from a compression fitting into the first line and screw it loosely to the faucet valve over the union level. Hold the bottom of the line to the water shut-off valve and mark it 1/2 inch below the edge of the valve's threaded stem (90°/90°).

Disconnect the line and use a pipe cutter to cut along this mark. Repeat on the other supply line.

Install the hot and cold valves

Loosen the mounting nut and washer on one of the valves. Then push the valve up through the sink hole. Attach the washer from above (LEFT). From under the sink, tighten the mounting nut by hand then finish with a basin wrench. Repeat for the other valve.

Screw the two short braided lines to the hot and cold valves and then to each side of the spout tee. Finger-tighten all four nuts. Then using an adjustable wrench, tighten each one another quarter turn (90°/90°). Don't overtighten these nuts because you could damage the compression fittings and cause leaks.

Fit the faucet handles onto the valves. Adjust them so they're straight to the sides when turned off and snug a few more turns. Hand-tighten the set screws with an Allen wrench.

If the faucet line is too long, make a loop with it if it doesn't look.



BUILD YOUR SKILL Learn the safe way to tighten and loosen valves and pipe fittings. Workshop p. 138



4

Hook up the supply lines

For hot and cold supply lines, locate the 1/2-inch compression fitting to the faucet valves. Secure the 1/2-inch fitting to the water shut-off valve.

For rigid supply lines, slide a 1/2-inch nut (there's a compression fitting on the supply line [you don't need the brass ring or female flare]) hand-tighten it to the faucet valve over the water shut-off. Slide the 1/2-inch nut and then a female nut from the fitting onto the valve. Hand-tighten the nut to the water shut-off valve over the female J-PTT.

Using an adjustable wrench, tighten the 1/2-inch nut on each supply line. Then using torque-and-groove pliers, hold this connection steady while you tighten the 1/2-inch nut on the water shut-off valve a quarter turn. Repeat for the other supply line.

TIP >

Get some access to the connection of the water shut-off valve by removing the valve's cover. Just be sure to hold the handle to keep the water supply turned off as you remove it to get access.

Install the drain collar

Using torque-and-groove pliers, snip the nuts holding together the trap-line drain tailpiece and the drain rim under the sink and remove them all. Thread a larger mounting nut, fiber washer and rubber washer onto the new drain rim.

Apply vinyl silicone to the underside of the new drain collar or slide the drain ring up into the drain hole from beneath. Secure the drain collar into the rim (BQ217), making sure the hole in the drain rim faces the faucet.

Then tighten the mounting nut to the sink from underneath. Wipe away any excess silicone that oozes out from under the drain collar.

Wrap the threads of the old drain tailpiece with Teflon tape. Attach it to the drain rim. Reassemble the trap.



5

Connect the pop-up waste assembly

The drain stopper and the ball rod are part of the pop-up waste assembly. The ball rod is screwing a metal stop with holes that hold a stainless ball rod. The other end of the ball rod reaches the bottom of the stopper. The ball fits into a hole in the drain rim and is held there by a metal nut. The stopper moves via this ball rod whenever the lift rod moves.

To assemble the pieces, replace plastic washer (then the metal nut) from the drain rim, then one side of spring clip onto the top metal of the ball rod. Stick the end of the ball rod through one of the holes on the stop and secure it with the spring clip. Push another washer in the other end of the ball rod and slide it into the drain rim (BQ217). Push the stopper in the drain and twist it to lock with the nut. Test that the stopper opens high enough to let water out. If not, you could loosen the nut on the stopper or adjust the stopper's look by loosening it.

To secure the ball rod, screw the metal nut onto the drain tailpiece, but leave it loose enough for the ball to move smoothly. With the stopper open, thread the ball rod down through the back of the spout and the top of the stopper. Tighten the nut some on the stop to hold the ball rod.

Turn on the water supply and check for leaks. Unscrew the aerator on the spout, turn on the faucet to flush out the system, then put the aerator back.

What to look for in your waste/faucet: bit.ly/drainwaste/faucetlook

buying guide

Over the years, ballroom faucets have gone from traditional Victorian curves to ultramodern angles and back again. Here's an array of some of our favorite wide-pivot faucets, showing the myriad shapes and styles available today.



DIAMANTINE ELEGANCE
Revised, by Kohler. In vibrant French gold. \$325. kohler.com



MODERN TAKE ON A CLASSIC
Aristo, by Grohe. In brushed nickel. \$325. groheusa.com



CLASSIC PERCH
Kingsley, in wrought iron from Moen. \$175. moen.com



TELEPORT SINKS
Lexusford from Delta in chrome. \$445. deltafaucet.com



CLASSIC LINES
Tenn Square, in brushed chrome, from American Standard. \$190. www.americanstandard.us.com



CONTEMPORARY TRADITION
Country spirit, in English bronze from Perrin and Rowe. \$725. rphhous.com

STYLING: JESSICA WATSON



Whether built at the level of your lawn or elevated ten feet high, if a deck is your choice, it's an outdoor sanctuary the quickest way to escape without picking a bag.

And homeowners are taking them in record numbers. In 2005 alone, Americans added 20 million decks to their homes and replaced nearly as many others. The numbers are not surprising. In addition to their undeniable emotional allure, decks have another built-in benefit: Putting one on is perhaps the easiest way to increase your living space. They're also well worth the time, because fully decked-out decks will look and perform over the long term.

No longer restricted to dull rectangular platforms of green-tinted pressure-treated lumber, homeowners feel upping enticing customers and builders to conjure up lush circles of handsome durable hardwoods or even finely composites that curve seamlessly around built-in spas or media rooms for beyond-the-barbecue cooking spaces. Decks are becoming more hospitable, too, welcoming family and friends with well-lit dining areas, portable hot temps, and comfortable sofas covered in water- and fade-resistant fabrics.

So before you pick a copycat look out of a home-center catalog or start cobbling together a bare-bones design of your own, check out how the pros do it and the following pages stylishly marry form with function.

decks in detail

How to get the right backyard retreat for your house—from where to site it and how to light it, to the materials and extras that will make it shine

by JOSEPH J. EVANS
Produced by COLETTE SCHLON DENNIS
Photo credits to KEN CUTMAN
Special thanks to JEFFREY

As well as identifying the best materials for the job, the author also provides a list of resources for finding the best materials and the best prices. The author also provides a list of resources for finding the best materials and the best prices.



the
great
equalizer

hand-designed deck can only enhance the outdoor structure. Originally, the owner of this late 19th-century Georgian Revival house had a large, ornate iron grill in the middle of the backyard, a combination fish pond and amphitheater—actually an old hot tub that the homeowners scuttled when they decided to build the deck and so drainage and a black plastic pond liner ringed with stones. The deck was an elevated gessoed pentagon log of a shed that was reachable only by a flight of stairs. “The two elements weren’t working with each other,” says designer. They took the old iron grill and gave them a good wash of the sand,” says designer and builder Dave Blanton. His solution: link them with a pressure-treated Georgia yellow deck that perfectly covers grounds around the pierce and up to the pond and entrance of the house. By forming the shed with matching pine plastic finished with an amber colorless stain, he also added attractive built-in seating. Finally, unifying the look, the brass boards lining the pierce, the stair treads, and the deck posts were painted white to match the rosewood railing, which is topped with the solid pine.

COMPLETE
THIS

PAPER T. 1208

Swirling in this feature helps to expel the water from various functions and makes it more efficient. Perennials, gardeners are a great way to bring seasonal color to decks. Hugel top benches provide seating and storage for cushions and other supplies. Many plants and the outdoor entertaining area will be looking better than ever. Tables and appliances bring the look out to the patio.

We will find a dock that is unique for place—one place that is flat aspie taking their stand as the arts buildings one with mimes who relate to your surroundings. The dream of this for the Carolina house located on a waterfront at the Appalachian Mountains did just that. They used interesting bark covered boardwalks instead of standard epoxy basketballs and wood legs, which are also outdoors where where animals for the ponds of the 42-inch high railing. The flat, hand-drawn local squares that is covered and the deck floorboards are indigenous pine that's been painted to match the rest. The railing posts are attached to the perimeter of the dock rather than along the outside wall. With placing ponds this way into the water you have something that is

[illegible]

THIS

RAILINGS

For safety, most building codes require that railings be of least 36 inches high for stairs built more than 30 inches off the ground with an open bannister or overhang. The bannister then goes at least 42 inches off the ground, but can be cut back just below the stairs.

Some codes also require railings with horizontal members that ribs can't climb like a ladder. Think how easy can building out of a variety of materials to suit any style or special circumstances. Popular options are: They used include cast iron, wrought-iron and tubular metal sheathing or mesh tubular piping, resin panels and balusters, and even tempered glass panels.





partners in grime

A couple of hard-core renovators share their wisdom about how to survive the mess—and stress—of remodeling together

When we bought our 2004 bungalow, we thought we were both looking at the same house. There were the same doors, walls, and windows in front of us. We walked through the same rooms. Only after we signed the papers did we realize that two people can look at a place and have completely different notions about what they see: the scope of the renovation, what to tackle first, how much it would all cost. We stood in the same place at the same time, but our visions were rooms apart.

That's especially problematic twice we're living in our floor: upper-flooring projects as we go, and doing much of the work ourselves. So my difference of opinion can quickly become A Very Big Deal. While not everyone may dive in as deeply as we have, no couple can avoid this survival truth: If you embark on home improvement together, you'll eventually hit choppy seas.

Find us to see what we've learned from navigating some of the everyday challenges a renovation can dish out. —B

By AARON AND JEANNE OLSON
Illustrations by PRAVINEESH



THE FOREVER EXPANDING HOUSE

How one man simplified

a lifetime of remodeling by starting with a frame that accepts endless additions

LEFT Architect Robert Leach designed and built his own laboratory, getting what a lot of clients constructed that made expansion easy. Because there were so few bad building materials, he could reconfigure and add whenever desired. The roof supports even an elderly 8-by-14-inch beam for support. **BELOW** Custom touches like the 19th-century wooden table in the entry hall make practical use of the exposed posts.



BY GILLERSON
PHOTOGRAPHY MARK LAMON
STYLING SIMON HENRIKSSON

F

all as low with an existing house, and you expand where you can, preserving the family doesn't require it. But it's to love where you're on land, and you might do what architect Robert Leamer did: build a house that's piggybacked to grow with you.

When he found his dream lot in 1954, a weedy three-quarters of an acre in West Los Angeles, Leamer knew an odd-on-yards frame was a must for his young family. For starters, it was more common back then to expect your first home to be your only one. And Leamer, then in his pre-ford days to last his 40-year architectural career at a single firm, his Charles and Ray Eames lounge chair, and certainly his house, "The last

looked beautiful, with all these trees on both from a remodeling road," Leamer says. He and his wife, Shirley, decided they'd never leave.

Leamer's background as an architect led him to a more practical idea: Design the house with very few load-bearing walls in the interior, and he'll be able to expand and reconfigure as necessary. In the broader sense, the post-and-beam frame he employed has allowed him to add a master suite, expand the garage, tack on a laundry room, and remodel the kitchen—all without disturbing the basic structure. Changing the scenery, you might say, without ever changing his address.

The house had to be flexible, since the property itself had plenty of limitations. For one, the neighborhood's developer—coastal California builder Cliff May— stipulated that only single-story, wood-frame ranches could be built. And this lot, the only one still available in his price range, had an odd Y shape that backed up to the current lot of a hill. "What bothered me most," Leamer recalls, "was that above the star property line there was an outcropping of rock rising about 40 feet."

Fortunately, young couples share a lot of pluck in the face of such challenges. It didn't hardly hit at the time, Leamer and his wife were students, having already survived several years in a one-bedroom apartment with the kids coming in back back in the dining room.

Over the land was cleared and the site was prepped for the concrete slab foundation, Leamer was finally ready to create his own self-sufficient version of the suburban house he'd built for other people. "I'd done this in small homes that didn't need to look very technical, but never on this scale," he says. He started with three basic house forms to form a Y shape. The short leg of the Y contained the living area, connected by a hallway to Leamer's study, and a two-car garage, respectively. The longer bar held the dining room, followed by a gender room, the family room, two kids' bedrooms, and the master suite. A bump-out off the dining room housed the kitchen. All the house was built the same way, with an exposed rickety 4x4 5/8-inch ridge beam supporting rafters 3 feet on center, sitting on a header that transmits the roof's weight to piers on the perimeter.

"It's a simple grid," Leamer explains. "Wherever the exterior wood wall joints meet, which is about

36. **BELOW** Leamer perfected and the study's exterior and flows into the living room, which is the post-and-beam frame. The post-and-beam frame is the original structure. **OPPOSITE** The exterior is the original structure. The interior is a post-and-beam frame. The exterior is the original structure. The interior is a post-and-beam frame.





every 6 feet, there's a structural post. It's the same with the wall-sized porch of glass. So aside from a few bearing walls, you have an open plan where the partition walls can come and go with no additional steel support."

Twelve years after completing the house, he tested his plan, clipping off the south front corner and extending an existing corridor through the opening into a new 439-square-foot master suite. As in the other wings, the new 27-foot-long addition got its own sturdy ridge beam. To enlarge the family room and both bedrooms, these walls were just pushed deeper into the master bedroom's original space.

At times brought changes in Lesnetz's life—the kids grew up and moved away, Shirley died, and he married his second wife, Tina—the house changed with him. In 1993, he remodeled the kitchen, breaking through a closet and widening the existing breakfast nook to create a new, fully loaded breakfast room addition. Throughout, the new spaces blend seamlessly with the old: the same exposed Douglas fir joists and beams, the same unfinished cedar walls and ceilings, all left to mellow with age.

And every room boasts matching views. In the family room, center walls of plate glass showcase the vast forest and home turf in front as well as the green hills at our back. The end walls, also floor-to-ceil glass, overlook the 20 acres and cedar that Lesnetz was careful to preserve when he cleared the site. At first, so much transparency shocked the neighbors. "Back then, houses were usually built so that visitors couldn't even see past the front door," Lesnetz says. But it had practical as well as aesthetic benefits. With so much glass as solid masonry on the exterior, the house could take full advantage of its southern exposure for maximum daylight.

Blurring the line between indoors and out was high on his agenda from the beginning. Tinted windows over the entry's honeyway protect the dining area's wall, where it continues inside as exposed beams. At first, not even entrance walls blocked the view. When his children were

"The area was so pretty that I wanted everyone to be able to take advantage of the view from wherever they stood in the house. It's like you're under cover but also outdoors." —ROBERT LESNETZ, HOMEOWNER AND ARCHITECT

young, for example, their bedrooms walls slid away to open onto the glassed-in corridor overlooking the lawn. When they got older and needed more privacy, Lesnetz built pocket doors that slide away into hallways. "The area was so pretty that I wanted everyone to be able to take advantage of the view from wherever they stood," he says. "It's like you're under cover but also outdoors." (Perhaps not the best idea in the master suite, though, where the full-height glass walls eventually required floor-to-ceiling blinds to keep neighbors on horseback from peeping in.) That faking of never really being secluded lets visitors into the house as much water than its actual 17 feet.

In all, Lesnetz expanded his house from an original 2,450 square feet at the 1950s to 3,200 today, largely with his own hands. And although it all appears very polished, he says he did everything on a shoestring—\$71,000 total, including labor and materials. That just goes to show what you can do when you have a house built to meet all its own needs.

Lesnetz about high-tech building techniques: high ceiling open-plan spaces at WestWood. Above: John Lesnetz



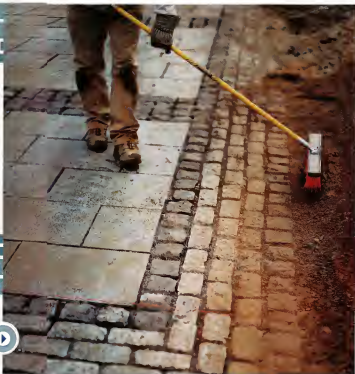
OPPOSITE: The honeycombed joists behind Lesnetz lounge after ABOVE LEFT To give a natural look to the honeycombed joists, Lesnetz designed his own soffits with time holes tapered into the wet concrete ABOVE RIGHT The 20-foot long master bedroom addition (see the end of the house) supports and beams construction LEFT Walls of plate glass in the living room allow the view from Lesnetz's porch to look through the landscape and the water past Lesnetz removed from the view clear the hill, a process that took two years.

PUT YOUR DRIVEWAY INTO OVERDRIVE

Rough cobblestone and
thick pavers distinguish a
long stretch of asphalt

■ BY SAL VASLICA | PHOTOGRAPHS BY CORSELL KATE ■

A last sweeping of polymeric sand fills the joints
of this garage driveway apron, revealing the
patterns and colors of the rough cobblestones
that surround the smooth face of pavers.



BEFORE



1 EXCAVATING THE ASPHALT When the asphalt was dug up, it was a mess. After a few days, it was a mess. After a few days, it was a mess. After a few days, it was a mess.



2 INSTALLING THE BASE LAYERS The base layers are a mix of gravel and sand. They are laid down in a series of layers, each about 2 inches thick. The layers are laid down in a series of layers, each about 2 inches thick.



3 CREATING THE BORDER Starting at one corner, the crew laid out the border stones. They were laid out in a series of layers, each about 2 inches thick. The layers are laid down in a series of layers, each about 2 inches thick.

4 FILLING IN The crew of masonry and block laid out the border stones. They were laid out in a series of layers, each about 2 inches thick. The layers are laid down in a series of layers, each about 2 inches thick.



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GRANITE Granite is a hard, durable stone. It is a natural stone, and it is a natural stone. It is a natural stone, and it is a natural stone. It is a natural stone, and it is a natural stone.

GRANITE Granite is a hard, durable stone. It is a natural stone, and it is a natural stone. It is a natural stone, and it is a natural stone. It is a natural stone, and it is a natural stone.

"The most expensive part of working with granite is the time you spend cutting it." —STEVEN COOK



5 | CUTTING THE PASTURE. Super-hunter Robert the 4-inch thick, power-on-the-and track course to the left of the open's slightly beyond the. For every other row in the field he also cut a power-infill to create a staggered-infilling bond pattern. For much the area within the design, the ground through the growth with the presence of his 7 herts power itself saw the power power the brook kept the field and the that down.



TO FILLING THE JOINTS. The steam-writing machine needed a way to cure the heat-cured filled joints with polyurethane foam, a material known with plastic binders that give the steam generator its shape. One "High-Temp Joint Filler" helped. After reaming it 1 inch thick layer into the joints. Only trapped it down with spray of water which is then the steams. Another layer composed with water-filled joints. Two days later the joints had hardened and the steam generator was in its final condition.



6) SETTING THE PATTERN. Once the cardboard header is turned a corner/flange is a starting point to begin learning the fold of pattern. After installing a mouse is free to guide the placement of the row to install the row following this sequence: 1A) Spread the rolling over 2 inches deep. (Folding the 170 pound skis is backwards from its neighbors. 1B) Set and level each skid with another, using a vertical flange to condition the skid. Finger touch-check the pattern's flow for level in two dimensions—left to right and front to back—before continuing to the next skid.



BUILD
TECHNICAL
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master's tools to
push updates.
Blockchain, p. 121

See Roger Cavillier's interview with [Englishinusa.com](http://www.englishinusa.com/dictionary) at <http://www.englishinusa.com/dictionary>

HIGH-TECH JOINT FILLERS

In yesterday's hardwires, joints were filled with either spew dust or sand. Today, the gap filling systems have grown to include compounds that are as porous and flexible as excellent shoe soles underfoot.

POLYMER-SARE. This non-melting polymer/polymer adhesive is a hot liquid that won't set plastic or wood yet flows through, but it flows when wet, allowing water to drain. It's ideal for wefloors or profiles made with concrete, brick, or natural stone pavers, acting as the joints are 1/4 in. (1.6 mm) wide and of least 1/4 in. (6.4 mm) deep. After 24 hr. (2 days), you can finish the proper surface and fill.

STABILIZING SAND. This green product covers plant fibers or tree roots before they weather and disintegrate. Should you ever need it, it's useful to know that it's not a clay. Oxygen is used to make the mixture. This polymeric sand, which helps when replacing damaged pavers, fills open voids, depending on movement and amount of moisture, but should be made once free for two to three years. At that point, you just add more of the same product.

HAND-JOINT STABILIZERS. These acrylic or epoxy-based liquids improve the elasticity and water resistance of welding rods or stone duct joints, as long as they're less than 1/2 inch wide. Also seals porous materials, like brick, joint sealers and cracks in concrete or any surface (Houston, Texas: 281-260-0000; www.Dynalene.com).



8 | TIGER ON STONE. David Brainerd, the landscape architect, designed this space in 1911. Black-and-gray-and-brown-toned granite, which evokes the ruggedness of the Three Peaks area, is treated here to contrast in the color scheme to the limestone to be placed to the design's right. As a practical matter, tiger rocks may be placed on open slabs to the left of the bench for their low weight and ease of change and removal. Maintenance for the space will be minimal because granite is so durable and the limestone slabs will last a month or more, setting aside

{ little } green giant

As TOH TV's latest project shows, even a modest bungalow renovation can earn a 5-star rating for conserving the planet's resources

Like a chef who gets a glowing restaurant review,

Michael and Michelle's house went online—and showed—to find out that their renovation had earned a coveted five stars from Austin Energy's Green Building Program, the crown prize for the crew from *This Old House* TV. The newly dedicated set is a 1,200-sq.-ft. bungalow spread over two modest 200-ft. bungalows to make space for their two and Michael's two sons, and do it in the greenest way possible. "I joined the green building program director Richard Morgan, and Austin Energy's Lynn Dallas and the crew the day before the TV show wrapped filming. They were like saying, 'It's a huge badge of honor,'" Michelle says. "It means that we did the right thing."

What surprised the crew however was the fact that Michelle and Michael's house was one of only 35 of nearly 7,000 projects that have qualified for the highest award since the program began in 2003, and it was only the third remodeling project. Most green houses in the city are new construction, but remodeling a green remodel isn't as difficult as many people think.

Morgan says the key isn't necessarily a big budget, but the mindset of the building team. "It's not hard to get the rating, but it takes commitment," he says. "These were committed homeowners, which is most important, and they found an architect, a builder, and subcontractors who were all also committed." Architect David Webster and veteran green builder Bill Moore addressed every detail of the project's values and building methods with Michelle and Michael, sticking to the basic tenets of green architecture and design at every turn.

The reason they had to be very thorough to follow for any homeowner who wants to think ultra-green and create a house worthy of the ultimate accolade. Here's a look at the thinking that guided them:



1. Use new materials whenever possible. And the fact that this project was a renovation, rather than new construction, makes it greener. It's smart because of all the reused resources. And to that she felt that the builder was smart to keep, hanging up the roof line by up to 6 feet. Builder's choice was to rip out and replace existing materials and materials, and just fix the cracks on the porch wall there.

2. Lay close to existing. Using green means not just having a house that's built to save energy and resources, but also ensuring a healthy environment. In Michael and Michelle's house is close to public transportation and shops, which means less fuel consumed when they go out.



PHOTOGRAPH BY STEPHEN KARLISCH

BY JEANNE HUBER
PHOTOGRAPHS BY STEPHEN KARLISCH
STYLING BY DIANA KIDD

13. Minimize the need for air-conditioning. The thoughtful roof reflects heat so the house stays cooler without extra air-conditioning. It's made from recycled materials and would be easy to recycle again if it had to be replaced every 20 years. Green did not, however, face east and west, sheltering the house's interior from direct sun on hot days.

14. Harness natural resources. On the back of the roof are solar panels that direct ac/dc power into a south- to 40 percent of the power used in the house. A thermostat that runs off the roof's solar power will be as effective as built-in wiring at its temperature for the year, which itself features solar-powered outlets for the dry-lake conditions. And a window there is an unusual design that the collection system can't handle: there's a French door around the house to divert the water.



13. House made from recycled materials. 14. Solar panels harness natural resources. 15. French door around the house to divert the water.



15. Finish with green savings. The interior was painted with low-VOC paint. The paint is a product of the U.S. Green Building Council (USGBC) that causes the painting process to be "less than the paint costs." It's better for you, for the painter, and for the environment. The paint is also "green" because it's made from recycled materials. The paint is also "green" because it's made from recycled materials. The paint is also "green" because it's made from recycled materials.

16. Choose efficient windows. Natural light pours in the front door, more through French doors that open out onto the screened porch just beyond. Designing interior spaces as they "breathe" light reduces the need to use electric lights. Use all of the natural windows, the doors feature double-pane insulated glass with low-E coating that lets white light through but keeps out heat. This reduces the need for air-conditioning, which the simple porch helps achieve and heat off anyway. Windows and doors also have low-E coating or shutters to reduce heat transfer.



17. Designed with low-energy lighting. The energy-efficient window lighting in the kitchen includes a ceiling light that is also a light fixture with ultra-efficient lighting, which is also a light fixture. The kitchen includes a ceiling light that is also a light fixture with ultra-efficient lighting, which is also a light fixture. The kitchen includes a ceiling light that is also a light fixture with ultra-efficient lighting, which is also a light fixture.



18. Build with wood responsibly. A small step in building with the kitchen—greenwood for the best that locally made products need less than the shipping. Before the kitchen was built, the house was built with wood. A small step in building with the kitchen—greenwood for the best that locally made products need less than the shipping. Before the kitchen was built, the house was built with wood. A small step in building with the kitchen—greenwood for the best that locally made products need less than the shipping. Before the kitchen was built, the house was built with wood.

"You only own a house temporarily, but the decisions you make about how to renovate it will affect future generations."

—JOE LACROIX, GREENWOOD



The Global Fund, created just four years ago, is financing a dramatic turnaround in the fight against AIDS. With lifesaving programs in over 130 countries, the Global Fund has already put nearly three-quarters of a million people on antiretroviral treatment, provided education, care and support to a million orphans, and reached millions more with the knowledge and tools needed to stop the spread of HIV. This is just the beginning, but there is already hope in the fight to end AIDS.



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PHOTOGRAPH BY BLAKE

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Two-wrench techniques for shutouts
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Good Soil After Bad

The contractors who cleaned up the oil spill on our property tried three times to plant grass on the fill they brought in, but only weeds came up. I'm enclosing a packet of the fill for your inspection. What will we have to do to get a nice lawn?

MICHAEL KUCH, SANDEW, NJ

Expert Costly reply: There's no way good is going to grow in that rocky soil. It should have been screened before it was delivered to remove all the stones, twigs, and other debris.

Here's what to do: First, remove the top 4 inches of fill and discard it. Then dig up about 2 cups of soil and send it—without rocks and twigs—to be tested by your local cooperative extension service. They'll send you back a report letting you know what nutrients it needs.

While you're waiting for the report to come back, start by loosening up the fill with

When F&B Landscape Services' Roger Clark needs to improve a soil as it will grow grass, he usually is successful and uncomplicated.

a coretiller. Then add 2 inches of sand and rototill again, followed by 2 inches of compost. Till that in, too. Now, grade the area with a roller and remove as much large debris from the surface as you can.

When you get the nod report, add the nutrients it calls for, plus a starter fertilizer for lawns, then rake in the seed. Keep the area moist, and I'll bet you'll soon be surrounded with a thick carpet of grass seedlings.

Adding a Second Story

I'm layering with the idea of adding a second story to our detached garage. It was built 30 years ago, but I don't know if its concrete slab is strong enough. How can I find out?

JOAN GREEN, WACO, TEX.

Tom Silen replies: If you will have the place for your garage, turn them over to a structural engineer. He'll check them to find out how thick the slab is, how wide the footings are, whether or not the slab and footings were reinforced with steel, and what the compressive strength of the concrete is. With that information and a knowledge of local building code requirements, the engineer should be able to tell you if a second story can be added.

If you don't have plans, the engineer might be able to give you some initial information anyway based on photos of the garage exterior and interior, including the roof courses, support posts, and any other visible structural elements. You'll have to pay for the engineer's services, but in my experience advice like that is well worth the cost.

Flot Light Goes Out

Last summer the pilot light went on gas water heater, up the attic, kept going out. It's been longer a spring chicken and don't want to climb anymore. What can I do to avoid it?

SHARON DAVILL, ALLEN, TEX.

Robert Rutherford replies: A water heater in the attic might wear out to meet Nocton's, but



JOHN COCHRAN



JOHN COCHRAN



JOHN COCHRAN



JOHN COCHRAN



JOHN COCHRAN



Second, make sure the pilot is protected from drafts. There should be a properly installed down-draft hood on top of the tank and a pilot-light baffle in place near the bottom. Lots of people leave the little off after lighting the pilot, and then even a gust of air through a gable vent can put it out.

If the light keeps going out after you make these adjustments, perhaps there's a fix in the attic that's blowing it out. Water-leaky man-ufacturers typically recommend not placing a water heater in an attic where there's any sort of power ventilation, including gable fans, power roof vents, and whole-house fans. Also, make sure your bathroom exhaust fan is connected to ductwork that vents to the outside; you'll be amazed at how many times I've seen these fans blowing air directly into an attic. If fans are at fault, you'll need to equip your heater with separate ductwork to ensure that it gets a dedicated supply of combustion air.

You should not undertake any of these solutions on your own. Hire a licensed heating professional to do the work.

Ants in the Trees

Some of my trees seem to be infested with carpenter ants. Are they harming the trees and, if so, is there a way to get rid of them?
WALTER FICHMAN, PORTLAND, ME

Roger Cook replies: A few ants in a tree are not a big concern, but an infestation of these critters can remove enough wood to weaken a major limb or the main one. And if an infested tree is close to the house, there's a chance the ants—or the trees—will end up indoors.

To find out just how severe the damage is, hire a certified arborist to evaluate your trees using a Resograph, a tool that arborists use to search the wood joints being penetrated by a drilling needle. This needle is so small that it doesn't harm the tree. The arborist can then tell you if the problem warrants removing the limbs or taking down the tree.

We find that borers are still in good shape, but my recommendation is to go with acetone. The most type in these cases is a poisonous one that can carry back to their nest.

Slippery Deck Steps

The steps leading up to our deck are made of pressure-treated lumber, which gets very slippery when it wet. What can I do to solve this dangerous situation?

CYRIL SPIEL, ELIZABETH, NJ

Kenzie replies: Your best bet is to install self-adhesive carpet strips on each step. The gritty surface of the strips really improves traction, even when wood steps aren't wet. I got mine at a marine supply store, but I've also seen similar products at home centers and hardware stores. The strips come in rolls 1 and 2 inches wide, simply cut off what you need.

I'd apply two or three strips parallel with the front edge of each tread. Before installing them, be sure the wood is sanded, thoroughly cleaned, and dry so the adhesive will stick.

When It's Time for a Key Check

How often should I replace the check on my old deckle-dr?

FRANK POLLEMAN, H HOLLYWOOD, CALIF.



Check a Check

Kenzie replies: Get a new check. The check on portable power tools is on a spindle with a felt-band, counter-clockwise thread, so it's on there pretty tight. Unspool the drill, open the check's jaws all the way, and remove the rotating screw inside by turning it clockwise. Next, put the short end of a hex key—1/8 inch or longer—into the check. Hold the body of

the drill firmly against your workbench, and hit the long end of the hex key with a mallet to turn the check counter-clockwise. Once it's loose, crank it off the spindle by hand, then screw it on the new check. I'd recommend a keyless model. Then you never have to worry about losing the check key.

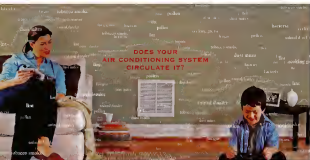
Weathering Details

The doorway leading into the room where I need to get old weathering has no siding around it. What do I do with the weathering when it reaches the doorway?

MATTHEW GOTTRE, SHERBOURNE, NY

Kenzie replies: How you handle this depends a lot on what materials you're using, but I can think of three basic ways to deal with your situation.

1. Cut material around. When the chair rail and baseboard reach above 3/4 inch shy of the opening, then cover the cuts with natural resin. If plywood or waferboard is used, cover any exposed corners with wood bands.



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Worst-Case Solutions



2. "Picture-frame" it. Measure the chair rail like a picture frame and run it vertically to the floor beside the doorway. This would cover any irregular edges or red grain.

3. Add casing. This is the option I would choose, using the same trim that's around the windows. Wainscoting adds a certain formality to a room, so why not use the doorway as well? You can learn it directly to the wall, leaving a 3/4-inch reveal, or set back, from the

edge of the opening. Then whatever wainscoting or burlboard you use can butt into the casing. If the chair rail projects from the wall, further down the casing, then cut out an inset, or above, then lead into the edge of the casing or to its base.

Mossy Lawn

We live in an area with lots of trees. Every problem is moss growing in the lawn.

When we tear it out, it's a large cement deck. How do I get rid of it for good?

MARK LUDWIG, PITTSBURGH, PA

Rugs Conception: How much do you love your lawn? Your yard is telling you that there's too much shade for grass to compete successfully against moss. If you really want a lawn there, either cut down some trees or prune them aggressively to let in more light.

Also, cut your soil. Moss loves soil, so you may need to add lime ("moss" it). That will encourage grass and discourage moss.

If that's another approach, if you can live with less lawn, in those areas where the moss is thickest, plant a shade garden, using shrubs, perennials, and ground cover that moisture the cooling conditions. In that setting, your moss might actually be a nice ground cover. You could also add some large rocks and maybe even a bench where you could sit and read off after mowing the healthy part of your lawn.

Stripping Paint From Fiberglass

Last year I purchased a wonderful fiberglass door. Just my husband painted it with old paint and the result is like hell. It looks terrible.

How can we remove the paint and then repair the door so it looks like the way it should? BRYANNE, KNOXVILLE

John Deere replies: It might be the paint, or it might be the painter's technique. Here's the test: Sand a section with 120-grit sandpaper.

If the paint powders, that's nothing wrong with it. The blanching is probably from lap marks where one area of the door has more paint on it than another. The strategy is to sand the rest of the door lightly and repaint it. But this time, paint each individual panel first, allowing time to wipe the excess off the side and away. Then paint each side, followed by each stile. This method will save you a lot of money and avoid lap marks.

If the paint soaks up when you sand it in some places, that's the paint is at least and you'll have to remove it entirely with a chemical stripper. Because stripper will eat into the surface of the fiberglass if it sits for too long, you want to leave it on just long enough to loosen the paint, then immediately scrape it off with a putty knife. Repeat if necessary. Or choose with a chemical stripper, a small nylon brush or a Scotch Brite pad will get the paint on the tiny recesses. Meanwhile any remaining stripper residue by rubbing the door with a Scotch Brite pad dipped in mineral alcohol, then wipe with a rag [and more alcohol if necessary].

until the rag comes away clean. Allow at least two hours for the door to dry, sand it lightly, and prime it, then use with fresh paint.

John Deere, a painting contractor in Concord, Mass., has demonstrated the free-lancing technique on several episodes of This Old House.

Installing a Pull-Down Attic Stair

My son wants to build pull-down attic stairs in his hallway ceiling. The problem is that the ceiling joists run perpendicular to the wall, and we've been told this makes it impossible to install pull-down stairs in that area?

FRANK KIRKMAN, GLENDALE, PA

Tom Oke replies: Most things are possible, but some are a lot more difficult than others. If your son's goal is framed with stairs, for example, you'll have to get structural engineering involved, and the job will probably end up being more trouble, and more costly, than it's worth. But if the roof is framed with lumber trusses and joists, you're in business.

What you'll have to do is cut or opening

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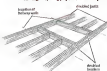
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Forming an opening perpendicular to the joists



through the joists—probably on inside down there, if the existing ceiling framing is on 16-inch centers. Then support the cut ends with double-up headers. These will reinforce the beam at the nearest support points, which will also have to be doubled because of the extra load they'll carry. Once all the framing is in place, trim the drywall flush and install the ladder.

This is a messy job, but you don't need a lot of assistance. In fact, the most expensive part of the project will be the rain and mold

Insulating Pairs?

I have some a-pair advertised as an insulator. Is this for real?

BY BRITTON WILKINS

Kevin O'Gorman replies: Sounds like what you're referring to is a type of panel that blocks the transfer of heat through walls. From what I've learned, it wouldn't hurt your house to put it with the stuff, but it's not likely to reduce your energy bills.

According to Duany Paden, a research assistant at the Florida Solar Energy Center, the R-value of any panel like this would be negligible, so using the term "insulation" is a stretch. True, paint can reduce summer heat gain by acting as a radiant barrier and reflecting the sun's rays. But unless there's adequate air ducts above how well it performs, that's no way to compare the benefits of this product to other options, such as insulating walls or installing radiant barrier foil in the attic.

Even if the paint were a good radiant barrier, its effectiveness would depend on its

location. A radiant barrier applied to a shaded wall, for example, won't be much help.

Black vs. Concrete

We're planning to build a house in Arizona and where the local contractor site foundation consists of several black instead of the traditionally more familiar with. What are the pros and cons?

JOHN KIRBY WILKINS

Tom Ellis replies: What kind of foundation a builder uses is usually determined by practical matters. In fact, it is to the concrete contractor's knowledge, how much the job cost is, what the local foundation contractors are most familiar with, and your budget.

All things being equal, I prefer a well-constructed, steel-reinforced concrete foundation because it's better at resisting the pressure of water, which can seep through blocks, or soil, which can erode them. But when a job site involves that 90-minute driving time from a ready-mix plant, there's no way the concrete

truck will reach the site in time to pour a foundation. You'll have to look at other options.

One would be to install precast concrete panels, like those made by Supacore. While I've used them on the TV show on the Aztec project house, these precast panels are often used as a finished underlayment and are placed. All the joints are sealed with a heavy-duty construction adhesive. This option will likely be much more expensive than block.

If you decide to go with block, don't take any shortcuts. The footing should be on firm, undisturbed soil or on a gravel pad. And the wall should be thoroughly reinforced with rebar and waterproofed with a membrane like Cofer-Dorkey's dimpled Dikro sheetrock—that lets water flow down to the drain.

Resist Tampering

How do I prevent the tampering from my solid brass outdoor light fixture? And then what can I do to protect the metal from tarnishing in the future?

CONSTANCE KIMBLE

Kevin O'Gorman replies: I talked to Chris Behn, who works with antique lighting fixtures and other metal items at the Silver Shoppe in Winterville, N.C. He says that the best thing you'll have to do is scrub the fixture with a typically applied to brass and copper lighting fixtures to keep them shiny. Copper tarnish and a custom rag will do the job in no time.

Once the fixture is clean, before mounting it, attach the screws with Plac-a-screws or, even better, metal-painting pins. Rub the fixture with a clean rag dipped in the pins, then when the tarnish is gone, wipe off any excess and hand-buff to a shine.

Spraying a light coat of lacquer on the metal will stop tarnish for a while, but you have to make it of the plastic or other material you don't want scratched with spray. Or you can skip the lacquer altogether and just rub on the Plac whenever the metal needs shining.

If it works only on solid brass or copper, not plated ones. So before you polish anything, check it with a magnet. If the magnet sticks, there's steel or iron beneath the surface. ■

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My Favorite Air Tools

I use my compressor most often for nailing my 18 gauge brad nails into the most use, but on delicate trimwork that could easily be marred. I really like those small pin guns that shoot headless 23 gauge nails. They barely leave a hole, so I only have to patch over them (break out the hammer, roller wheel or building staple multiple times after each push) later on by hand. Framing nails are also useful for shoring up things—say, where entering a new joint near to a window or door. That's because a single shot from a nailer is less disruptive than pounding away with a hammer.



Plugging Leaks

The last time I went over looking for leaks around the house, I found a small hole in my tool. You can get an airtight seal with a couple of wraps of plumber's Teflon tape around the hole (shown in the fitting, as shown). That's the same direction you turn the fitting when you back it to the end of the hose. Wrap the tape the wrong way and it will tear to grip and bunch up on you (shown in the fitting).



As air is compressed, water will condense into the tank, so be sure to drain it after each use. If you don't, the tank will start to rust from the inside. When a dirty valve won't cleanly open, the best fix is to take the compressor to get all the water out.

NORM'S TIP

Before you cut a hose, disconnect it at the compressor. Otherwise, the air trapped in the hose will make it hard to maneuver.

Fix for Damaged Hoses

Not used or hoses get stuffed, clogged, punctured or cut. Fortunately, you can easily make either a standard 1/2- or 3/4-inch hose with a repair kit. The kit includes a repair fitting and hose clamps. The new repair hose is made together as shown, so just add a new threaded end fitting.

1. Get rid of the damaged section. Slide a utility knife through the hole with a utility knife, leaving a clean surface on each end.
2. Insert the splice fitting. Slip the hose clamp onto the fitting and slide it over the hose. Push the hose over the fitting and slide the hose clamp up to the fitting. Tighten the clamp with the screwdriver.
3. Insert the other hose end. Put the second hose clamp on the other end of the hose and push the hose onto the other fitting. Tighten the clamp next to the fitting. Then give each clamp another turn to lock the fitting in place. Cover the hose clamps with electrical tape so they don't slip or flange.



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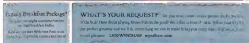


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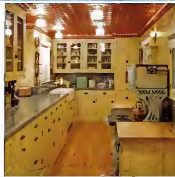
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TOP This archway connects the temple's interior from its monumental entrance and decorative sculptures.

MIDDLE LEFT: A stone archway with decorative arches and sculptures.

RIGHT One of the best views of the temple's interior.

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A blue GMC pickup truck is shown from a front-three-quarter view, driving through a muddy, rocky terrain. The truck is splashing mud, and the GMC logo is visible on the front grille. The background is a bright, hazy sky.

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